#3

SEQUENCE LISTING

<110> Xu, Jiangchun
        Dillon, Davin C.
        Mitcham, Jennifer L.
        Harlocker, Susan Louise
        Jiang Yuqui
        Reed, Steven G.
        Kalos, Michael D.
        Fanger, Gary R.
        Retter, Marc W.
        Solk, John A.
        Day, Craig H.
        Skeiky, Yasir A.W.
        Wang, Aijun
        Meagher, Madeleine

<120> COMPOSITIONS AND METHODS FOR THERAPY AND
       DIAGNOSIS OF PROSTATE CANCER

<130> 210121.42711C11

<140> US
<141> 2000-01-14

<160> 590

<170> FastSEQ for Windows Version 3.0

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<213> Homo sapien

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<223> n = A,T,C or G

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ctagagcggc cgccaccgcg gtggagctcc agcttttgtt ccctttagtg agggttaatt     420
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attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg     540
anctaactca cattaattgc gttgcgctca ctgnccgctt tccagtcngg aaaactgtcg     600
tgccagctgc attaatgaat cggccaacgc ncggggaaaa gcggtttgcg ttttgggggc     660
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tcttccgctt ctcgctcact nantcctgcg ctcggtcntt cggctgcggg gaacggtatc      720
actcctcaaa ggnggtatta cggttatccn naaatcnggg gatacccngg aaaaaanttt      780
aacaaaaggg cancaaaggg cngaaacgta aaaa                                  814
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<211> 816
<212> DNA
<213> Homo sapien

<220>
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<222> (1)...(816)
<223> n = A,T,C or G

<400> 2

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ctaaagtctg atgaacttcc caatcagatg agcatggatg attggccaga aatgaagaag      180
aagtttgcag atgtatttgc aaagaagacg aaggcagagt ggtgtcaaat ctttgacggc      240
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aaggaacggg gctcgtttat caccagtgag gagcaggacg tgagcccccg ccctgcacct      360
ctgctgttaa acaccccagc catcccttct ttcaaaaggg atccactagt tctagaagcg      420
gccgccaccg cggtggagct ccagcttttg ttccctttag tgagggttaa ttgcgcgctt      480
ggcgtaatca tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccccc      540
aacatacgag ccggaacata aagtgttaag cctggggtgc ctaatgantg agctaactcn      600
cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaaactgtcg tgccactgcn      660
ttantgaatc ngccacccc cgggaaaagg cggttgcntt ttgggcctct tccgctttcc       720
tcgctcattg atcctngcnc ccggtcttcg gctgcggnga acggttcact cctcaaaggc      780
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```

<210> 3
<211> 773
<212> DNA
<213> Homo sapien

<220>
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<223> n = A,T,C or G

<400> 3

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tcctcaaaag tcagaaccgg agtcacacag gcatctgtgc cgtcaaagat ttgacaccac      180
tctgccttcg tcttctttgc aaatacatct gcaaacttct tcttcatttc tggccaatca      240
tccatgctca tctgattggg aagttcatca gactttagtc canntccttt gatcagcagc      300
tcgtagaact ggggttctat tgctccaaca gccatgaatt ccccatctgc tgtcctgtaa      360
gtcgtataga aaggtgctcc accatccaac atgttctgtc ctcgaggggg ggcccggtac      420
ccaattcgcc ctatantgag tcgtattacg cgcgctcact ggccgtcgtt ttacaacgtc      480
gtgactggga aaaccctggg cgttaccaac ttaatcgcct tgcagcacat ccccctttcg      540
ccagctgggc gtaatancga aaaggcccgc accgatcgcc cttccaacag ttgcgcacct      600
```

```
gaatgggnaa atgggacccc cctgttaccg cgcattnaac ccccgcnggg tttngttgtt        660
accccacnt nnaccgctta cactttgcca gcgccttanc gcccgctccc tttcnccttt        720
cttcccttcc tttcncnccn ctttcccccg gggtttcccc cntcaaaccc cna              773
```

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<211> 828
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
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<223> n = A,T,C or G

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tcggaacact ggctgtctct gaagacttct cgctcagttt cagtgaggac acacacaaag       180
acgtgggtga ccatgttgtt tgtggggtgc agagatggga ggggtggggc ccaccctgga       240
agagtggaca gtgacacaag gtggacactc tctacagatc actgaggata agctggagcc       300
acaatgcatg aggcacacac acagcaagga tgacnctgta aacatagccc acgctgtcct       360
gngggcactg ggaagcctan atnaggccgt gagcanaaag aaggggagga tccactagtt       420
ctanagcggc cgccaccgcg gtgganctcc ancttttgtt ccctttagtg agggttaatt       480
gcgcgcttgg cntaatcatg gtcatanctn tttcctgtgt gaaattgtta tccgctcaca       540
attccacaca acatacganc cggaaacata aantgtaaac ctggggtgcc taatgantga       600
ctaactcaca ttaattgcgt tgcgctcact gcccgctttc caatcnggaa acctgtcttg       660
ccncttgcat tnatgaatcn gccaaccccc ggggaaaagc gtttgcgttt tgggcgctct       720
tccgcttcct cnctcantta ntccctncnc tcggtcattc cggctgcngc aaaccggttc       780
accncctcca aaggggtat tccggtttcc ccnaatccgg gganancc                    828
```

```
<210> 5
<211> 834
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A,T,C or G

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agttttaatt gcatccaaag tactaacaaa aactctagca atcaagaatg gcagcatgtt       120
atttatataac aatcaacacc tgtggctttt aaaattggt tttcataaga taatttatac       180
tgaagtaaat ctagccatgc ttttaaaaaa tgctttaggt cactccaagc ttggcagtta       240
acatttggca taaacaataa taaaacaatc acaatttaat aaataacaaa tacaacattg       300
taggccataa tcatatacag tataaggaaa aggtggtagt gttgagtaag cagttattag       360
aatagaatac cttggcctct atgcaaatat gtctagacac tttgattcac tcagccctga       420
cattcagttt tcaaagtagg agacaggttc tacagtatca ttttacagtt tccaacacat       480
tgaaaacaag tagaaaatga tgagttgatt tttattaatg cattacatcc tcaagagtta       540
tcaccaaccc ctcagttata aaaaattttc aagttatatt agtcatataa cttggtgtgc       600
```

```
ttattttaaa ttagtgctaa atggattaag tgaagacaac aatggtcccc taatgtgatt      660
gatattggtc atttttacca gcttctaaat ctnaactttc aggcttttga actggaacat      720
tgnatnacag tgttccanag ttncaaccta ctggaacatt acagtgtgct tgattcaaaa      780
tgttattttg ttaaaaatta aattttaacc tggtggaaaa ataatttgaa atna            834
```

```
        <210> 6
        <211> 818
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
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        <223> n = A,T,C or G

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aaccacatct acaaaatgcc agtatcaggc ggcggcttcg aagccaaagt gatgtttgga      120
tgtaaagtga aatattagtt ggcggatgaa gcagatagtg aggaaagttg agccaataat      180
gacgtgaagt ccgtggaagc ctgtggctac aaaaaatgtt gagccgtaga tgccgtcgga      240
aatggtgaag ggagactcga agtactctga ggcttgtagg agggtaaaat agagacccag      300
taaaattgta ataagcagtg cttgaattat ttggtttcgg ttgttttcta ttagactatg      360
gtgagctcag gtgattgata ctcctgatgc gagtaatacg gatgtgttta ggagtgggac      420
ttctagggga tttagcgggg tgatgcctgt tgggggccag tgccctccta gttggggggt      480
aggggctagg ctggagtggt aaaaggctca gaaaaatcct gcgaagaaaa aaacttctga      540
ggtaataaat aggattatcc cgtatcgaag gccttttttgg acaggtggtg tgtggtggcc      600
ttggtatgtg ctttctcgtg ttacatcgcg ccatcattgg tatatggtta gtgtgttggg      660
ttantanggc ctantatgaa gaacttttgg antggaatta aatcaatngc ttggccggaa      720
gtcattanga nggctnaaaa ggccctgtta ngggtctggg ctnggtttta cccnacccat      780
ggaatncncc ccccggacna ntgnatccct attcttaa                             818
```

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        <211> 817
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(817)
        <223> n = A,T,C or G

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cgggccctat ttcaaagatt tttaggggaa ttaattctag gacgatgggt atgaaactgt      120
ggtttgctcc acagatttca gagcattgac cgtagtatac ccccggtcgt gtagcggtga      180
aagtggtttg gtttagacgt ccgggaattg catctgtttt taagcctaat gtggggacag      240
ctcatgagtg caagacgtct tgtgatgtaa ttattatacn aatggggggct tcaatcggga      300
gtactactcg attgtcaacg tcaaggagtc gcaggtcgcc tggttctagg aataatgggg      360
gaagtatgta ggaattgaag attaatccgc cgtagtcggt gttctcctag gttcaatacc      420
attggtggcc aattgatttg atggtaaggg gagggatcgt tgaactcgtc tgttatgtaa      480
aggatncctt ngggatggga aggcnatnaa ggactangga tnaatggcgg gcangatatt      540
```

```
tcaaacngtc tctanttcct gaaacgtctg aaatgttaat aanaattaan tttngttatt      600
gaatnttnng gaaaagggct tacaggacta gaaaccaaat angaaaanta atnntaangg      660
cnttatcntn aaaggtnata accnctccta tnatcccacc caatngnatt ccccacncnn      720
acnattggat nccccanttc canaaanggc cnccccccgg tgnannccnc cttttgttcc      780
cttnantgan ggttattcnc ccctngcntt atcancc                              817
```

        <210> 8
        <211> 799
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(799)
        <223> n = A,T,C or G

        <400> 8
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cataaggaga actttctgct ggcacgcgct agggacaagc gggagagcga ctccgagcgt      120
ctgaagcgca cgtcccagaa ggtggacttg gcactgaaac agctgggaca catccgcgag      180
tacgaacagc gcctgaaagt gctggagcgg gaggtccagc agtgtagccg cgtcctgggg      240
tgggtggccg angcctganc cgctctgcct tgctgccccc angtgggccg ccaccccctg      300
acctgcctgg gtccaaacac tgagccctgc tggcggactt caaggganac ccccacangg      360
ggattttgct cctanantaa ggctcatctg ggcctcggcc cccccacctg gttggccttg      420
tctttgangt gagccccatg tccatctggg ccactgtcng gaccaccttt ngggagtgtt      480
ctccttacaa ccacannatg cccggctcct cccggaaacc antcccancc tgngaaggat      540
caagncctgn atccactnnt nctanaaccg gccnccnccg cngtggaacc cnccttntgt      600
tccttttcnt tnagggttaa tnncgccttg gccttnccan ngtcctncnc nttttccnnt      660
gttnaaattg ttangcnccc nccnntcccn cnncnncnan cccgacccnn annttnnann      720
ncctgggggt nccnncngat tgacccnncc ncccntntant tgcnttnggg nncnntgccc      780
ctttccctct ngggganncg                                                 799
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        <210> 9
        <211> 801
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(801)
        <223> n = A,T,C or G

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taangatgac actcccaaag gtggtcctga cagtggccca gatggacatg gggctcacct      120
caaggacaag gccaccaggt gcgggggccg aagcccacat gatccttact ctatgagcaa      180
aatcccctgt gggggcttct ccttgaagtc cgccancagg gctcagtctt tggacccang      240
caggtcatgg ggttgtngnc caactggggg ccncaacgca aaanggcnca gggcctcngn      300
cacccatccc angacgcggc tacactnctg gacctcccnc tccaccactt tcatgcgctg      360
ttcntacccg cgnatntgtc ccanctgttt cngtgccnac tccancttct nggacgtgcg      420
ctacatacgc ccggantcnc nctcccgctt tgtccctatc cacgtnccan caacaaattt      480
```

```
cnccntantg caccnattcc cacntttnnc agntttccnc nncgngcttc cttntaaaag    540
ggttganc008 cggaaaatnc cccaaagggg ggggggccngg tacccaactn ccccctnata    600
gctgaantcc ccatnaccnn gnctcnatgg anccntccnt tttaannacn ttctnaactt    660
gggaanancc ctcgnccntn ccccncttaa tcccnccttg cnangnncnt ccccnntcc    720
ncccnnntng gcntntnann cnaaaaaggc ccnnnancaa tctcctnncn cctcanttcg    780
ccanccctcg aaatcggccn c                                                 801
```

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        <213> Homo sapien

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        <221> misc_feature
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        <223> n = A,T,C or G

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agatcctgcc ctacacactg gcctccctct accaccggga gaagcaggtg ttcctgccca    180
aataccgagg ggacactgga ggtgctagca gtgaggacag cctgatgacc agcttcctgc    240
caggccctaa gcctggagct cccttcccta atggacacgt gggtgctgga ggcagtggcc    300
tgctcccacc tccacccgcg ctctgcgggg cctctgcctg tgatgtctcc gtacgtgtgg    360
tggtgggtga gcccaccgan gccagggtgg ttccgggccg gggcatctgc ctggacctcg    420
ccatcctgga tagtgcttcc tgctgtccca ngtggcccca tccctgttta tgggctccat    480
tgtccagctc agccagtctg tcactgccta tatggtgtct gccgcaggcc tgggtctggt    540
cccatttact ttgctacaca ggtantattt gacaagaacg anttggccaa atactcagcg    600
ttaaaaaatt ccagcaacat tgggggtgga aggcctgcct cactgggtcc aactccccgc    660
tcctgttaac cccatggggc tgccggcttg gccgccaatt tctgttgctg ccaaantnat    720
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        <210> 11
        <211> 772
        <212> DNA
        <213> Homo sapien

        <220>
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        <223> n = A,T,C or G

        <400> 11
cccaccctac ccaaatatta gacaccaaca cagaaaagct agcaatggat tcccttctac     60
tttgttaaat aaataagtta aatatttaaa tgcctgtgtc tctgtgatgg caacagaagg    120
accaacaggc cacatcctga taaaaggtaa gagggggtg gatcagcaaa aagacagtgc    180
tgtgggctga ggggacctgg ttcttgtgtg ttgcccctca ggactcttcc cctacaaata    240
actttcatat gttcaaatcc catggaggag tgtttcatcc tagaaactcc catgcaagag    300
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tattcagctc ccaaaaaccc ttctctaggt gtgtctcaac taggaggcta gctgttaacc    420
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ctgagcctgg gtaatccacc tgcagagtcc ccgcattcca gtgcatggaa cccttctggc     480
ctccctgtat aagtccagac tgaaacccc ttggaaggnc tccagtcagg cagccctana     540
aactgggga aaaagaaaag gacgccccan cccccagctg tgcanctacg cacctcaaca     600
gcacagggtg gcagcaaaaa aaccacttta ctttggcaca aacaaaaact ngggggggca     660
accccggcac cccnangggg gttaacagga ancngggnaa cntggaaccc aattnaggca     720
ggcccnccac cccnaatntt gctgggaaat ttttcctccc ctaaattntt tc           772
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```
        <210> 12
        <211> 751
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(751)
        <223> n = A,T,C or G

        <400> 12
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ttggctgtgt tggtgacgtt gtcattgcaa cagaatgggg gaaaggcact gttctctttg     180
aagtanggtg agtcctcaaa atccgtatag ttggtgaagc cacagcactt gagcccttc      240
atggtggtgt tccacacttg agtgaagtct tcctgggaac cataatcttt cttgatggca     300
ggcactacca gcaacgtcag ggaagtgctc agccattgtg gtgtacacca aggcgaccac     360
agcagctgcn acctcagcaa tgaagatgan gaggangatg aagaagaacg tcncgagggc     420
acacttgctc tcagtcttan caccatanca gcccntgaaa accaananca aagaccacna     480
cnccggctgc gatgaagaaa tnacccccncg ttgacaaact tgcatggcac tggganccac     540
agtggcccna aaaatcttca aaaaggatgc cccatcnatt gaccccccaa atgcccactg     600
ccaacagggg ctgccccacn cncnnaacga tganccatt gnacaagatc tncntggtct     660
tnatnaacnt gaaccctgcn tngtggctcc tgttcaggnc cnnggcctga cttctnaann     720
aangaactcn gaagnccca cngganannc g                                    751
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        <211> 729
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(729)
        <223> n = A,T,C or G

        <400> 13
gagccaggcg tccctctgcc tgcccactca gtggcaacac ccgggagctg ttttgtcctt      60
tgtggancct cagcagtncc ctctttcaga actcantgcc aagancccctg aacaggagcc     120
accatgcagt gcttcagctt cattaagacc atgatgatcc tcttcaattt gctcatcttt     180
ctgtgtggtg cagccctgtt ggcagtgggc atctgggtgt caatcgatgg ggcatccttt     240
ctgaagatct tcgggccact gtcgtccagt gccatgcagt ttgtcaacgt gggctacttc     300
ctcatcgcag ccggcgttgt ggtcttagct ctaggtttcc tgggctgcta tggtgctaag     360
actgagagca agtgtgccct cgtgacgttc ttcttcatcc tcctcctcat cttcattgct     420
gaggttgcaa tgctgtggtc gccttggtgt acaccacaat ggctgagcac ttcctgacgt     480
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tgctggtaat gcctgccatc aanaaaagat tatgggttcc caggaanact tcactcaagt    540
gttggaacac caccatgaaa gggctcaagt gctgtggctt cnnccaacta tacggatttt    600
gaagantcac ctacttcaaa gaaaanagtg cctttccccc atttctgttg caattgacaa    660
acgtccccaa cacagccaat tgaaaacctg cacccaaccc aaangggtcc ccaaccanaa    720
attnaaggg                                                           729
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        <210> 14
        <211> 816
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
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        <223> n = A,T,C or G

        <400> 14
tgctcttcct caaagttgtt cttgttgcca taacaaccac cataggtaaa gcgggcgcag     60
tgttcgctga aggggttgta gtaccagcgc gggatgctct ccttgcagag tcctgtgtct    120
ggcaggtcca cgcagtgccc tttgtcactg gggaaatgga tgcgctggag ctcgtcaaag    180
ccactcgtgt atttttcaca ggcagcctcg tccgacgcgt cggggcagtt gggggtgtct    240
tcacactcca ggaaactgtc natgcagcag ccattgctgc agcggaactg ggtgggctga    300
cangtgccag agcacactgg atggcgcctt ccatgnnan gggccctgng ggaaagtccc     360
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atcttcttcc cgaaaggtag ttnttcttgt tgcccaancc anccccntaa acaaactctt    480
gcanatctgc tccgnggggg tcntantacc ancgtgggaa aagaacccca ggcngcgaac    540
caancttgtt tggatncgaa gcnataatct nctnttctgc ttggtggaca gcaccantna    600
ctgtnnanct ttagnccntg gtcctcntgg gttgnncttg aacctaatcn ccnntcaact    660
gggacaaggt aantngccnt cctttnaatt cccnancntn cccccctggtt tggggtttttn   720
cncnctccta ccccagaaan nccgtgttcc cccccaacta ggggccnaaa ccnnttnttc    780
cacaaccctn ccccacccac gggttcngnt ggttng                             816
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```
        <210> 15
        <211> 783
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(783)
        <223> n = A,T,C or G

        <400> 15
ccaaggcctg ggcaggcata nacttgaagg tacaacccca ggaacccctg gtgctgaagg     60
atgtggaaaa cacagattgg cgcctactgc ggggtgacac ggatgtcagg gtagagagga    120
aagacccaaa ccaggtggaa ctgtggggac tcaaggaang cacctacctg ttccagctga    180
cagtgactag ctcagaccac ccagaggaca cggccaacgt cacagtcact gtgctgtcca    240
ccaagcagac agaagactac tgcctcgcat ccaacaangt gggtcgctgc cggggctctt    300
tcccacgctg gtactatgac cccacggagc agatctgcaa gagtttcgtt tatggaggct    360
gcttgggcaa caagaacaac taccttcggg aagaagagtg cattctancc tgtcngggtg    420
tgcaaggtgg gcctttgana ngcanctctg gggctcangc gactttcccc cagggcccct    480
```

```
ccatggaaag gcgccatcca ntgttctctg gcacctgtca gcccacccag ttccgctgca      540
ncaatggctg ctgcatcnac antttcctng aattgtgaca acaccccca ntgcccccaa       600
ccctcccaac aaagcttccc tgttnaaaaa tacnccantt ggcttttnac aaacncccgg      660
cncctccntt ttccccnntn aacaaagggc nctngcnttt gaactgcccn aacccnggaa      720
tctnccnngg aaaaantncc cccctggtt cctnnaancc cctccncnaa anctnccccc       780
ccc                                                                    783


           <210> 16
           <211> 801
           <212> DNA
           <213> Homo sapien

           <220>
           <221> misc_feature
           <222> (1)...(801)
           <223> n = A,T,C or G

           <400> 16
gccccaattc cagctgccac accacccacg gtgactgcat tagttcggat gtcatacaaa       60
agctgattga agcaaccctc tacttttgg tcgtgagcct tttgcttggt gcaggtttca      120
ttggctgtgt tggtgacgtt gtcattgcaa cagaatgggg gaaaggcact gttctctttg      180
aagtagggtg agtcctcaaa atccgtatag ttggtgaagc cacagcactt gagccctttc      240
atggtggtgt tccacacttg agtgaagtct tcctgggaac cataatcttt cttgatggca      300
ggcactacca gcaacgtcag gaagtgctca gccattgtgg tgtacaccaa ggcgaccaca      360
gcagctgcaa cctcagcaat gaagatgagg aggaggatga agaagaacgt cncgagggca      420
cacttgctct ccgtcttagc accatagcag cccangaaac caagagcaaa gaccacaacg      480
ccngctgcga atgaaagaaa ntacccacgt tgacaaactg catggccact ggacgacagt      540
tggcccgaan atcttcagaa aagggatgcc ccatcgattg aacacccana tgcccactgc      600
cnacagggct gcnccncncn gaaagaatga gccattgaag aaggatcntc ntggtcttaa      660
tgaactgaaa ccntgcatgg tggcccctgt tcagggctct tggcagtgaa ttctganaaa      720
aaggaacngc ntnagccccc ccaaangana aaacacccc gggtgttgcc ctgaattggc      780
ggccaaggan ccctgccccn g                                                801


           <210> 17
           <211> 740
           <212> DNA
           <213> Homo sapien

           <220>
           <221> misc_feature
           <222> (1)...(740)
           <223> n = A,T,C or G

           <400> 17
gtgagagcca ggcgtccctc tgcctgccca ctcagtggca cacccggga gctgttttgt       60
cctttgtgga gcctcagcag ttccctcttt cagaactcac tgccaagagc cctgaacagg      120
agccaccatg cagtgcttca gcttcattaa gaccatgatg atcctcttca atttgctcat      180
ctttctgtgt ggtgcagccc tgttggcagt gggcatctgg gtgtcaatcg atggggcatc      240
ctttctgaag atcttcgggc cactgtcgtc cagtgccatg cagtttgtca acgtgggcta      300
cttcctcatc gcagccggcg ttgtggtctt tgctcttggt ttcctgggct gctatggtgc      360
taagacggag agcaagtgtg ccctcgtgac gttcttcttc atcctcctcc tcatcttcat      420
```

```
tgctgaagtt gcagctgctg tggtcgcctt ggtgtacacc acaatggctg aaccattcct    480
gacgttgctg gtantgcctg ccatcaanaa agattatggg ttcccaggaa aaattcactc    540
aantntggaa caccnccatg aaaagggctc caatttctgn tggcttcccc aactataccg    600
gaattttgaa agantcnccc tacttccaaa aaaaaanant tgcctttncc cccnttctgt    660
tgcaatgaaa acntcccaan acngccaatn aaaacctgcc cnnncaaaaa ggntcncaaa    720
caaaaaaant nnaagggttn                                                740


            <210> 18
            <211> 802
            <212> DNA
            <213> Homo sapien

            <220>
            <221> misc_feature
            <222> (1)...(802)
            <223> n = A,T,C or G

            <400> 18
ccgctggttg cgctggtcca gngnagccac gaagcacgtc agcatacaca gcctcaatca     60
caaggtcttc cagctgccgc acattacgca gggcaagagc ctccagcaac actgcatatg    120
ggatacactt tactttagca gccagggtga caactgagag gtgtcgaagc ttattcttct    180
gagcctctgt tagtggagga agattccggg cttcagctaa gtagtcagcg tatgtcccat    240
aagcaaacac tgtgagcagc cggaaggtag aggcaaagtc actctcagcc agctctctaa    300
cattgggcat gtccagcagt tctccaaaca cgtagacacc agnggcctcc agcacctgat    360
ggatgagtgt ggccagcgct gcccccttgg ccgacttggc taggagcaga aattgctcct    420
ggttctgccc tgtcaccttc acttccgcac tcatcactgc actgagtgtg ggggacttgg    480
gctcaggatg tccagagacg tggttccgcc ccctcnctta atgacaccgn ccanncaacc    540
gtcggctccc gccgantgng ttcgtcgtnc ctgggtcagg gtctgctggc cnctacttgc    600
aancttcgtc nggcccatgg aattcaccnc accggaactn gtangatcca ctnnttctat    660
aaccggncgc caccgcnnnt ggaactccac tcttnttncc tttacttgag ggttaaggtc    720
acccttnncg ttaccttggt ccaaaccntn ccntgtgtcg anatngtnaa tcnggnccna    780
tnccanccnc atangaagcc ng                                             802


            <210> 19
            <211> 731
            <212> DNA
            <213> Homo sapien

            <220>
            <221> misc_feature
            <222> (1)...(731)
            <223> n = A,T,C or G

            <400> 19
cnaagcttcc aggtnacggg ccgcnaancc tgacccnagg tancanaang cagncngcgg     60
gagcccaccg tcacgnggng gngtctttat nggaggggggc ggagccacat cnctggacnt    120
cntgacccca actccccncc ncncantgca gtgatgagtg cagaactgaa ggtnacgtgg    180
caggaaccaa gancaaannc tgctccnntc caagtcggcn naggggggcgg ggctggccac    240
gcncatccnt cnagtgctgn aaagcccncn cctgtctact tgtttggaga acngcnnnga    300
catgcccagn gttanataac nggcngagag tnantttgcc tctcccttcc ggctgcgcan    360
cgngtntgct tagnggacat aacctgacta cttaactgaa cccnngaatc tnccncccct    420
```

```
ccactaagct cagaacaaaa aacttcgaca ccactcantt gtcacctgnc tgctcaagta      480
aagtgtaccc catncccaat gtntgctnga ngctctgncc tgcnttangt tcggtcctgg      540
gaagacctat caattnaagc tatgtttctg actgcctctt gctccctgna acaancnacc      600
cnncnntcca aggggggggnc ggcccccaat cccccaacc ntnaattnan tttanccccn      660
cccccnggcc cggcctttta cnancntcnn nnacngggna aaaccnnngc tttncccaac      720
nnaatccncc t                                                          731
```

        <210> 20
        <211> 754
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(754)
        <223> n = A,T,C or G

        <400> 20

```
tttttttttt tttttttttt taaaaacccc ctccattnaa tgnaaacttc cgaaattgtc       60
caacccctc ntccaaatnn ccntttccgg gnggggggttc caaacccaan ttannttttgg      120
annttaaatt aaatnttnnt tggnggnnna anccnaatgt nangaaagtt naacccanta      180
tnancttnaa tncctggaaa ccngtngntt ccaaaaatnt ttaaccctta antccctccg      240
aaatngttna nggaaaaccc aanttctcnt aaggttgttt gaaggntnaa tnaaaanccc      300
nnccaattgt ttttngccac gcctgaatta attggnttcc gntgtttttcc nttaaaanaa      360
ggnnanccc ggttantnaa tcccccccnnc cccaattata ccganttttt ttngaattgg      420
ganccncgg gaattaacgg ggnnnntccc tnttgggggg cnggnncccc ccccntcggg      480
ggttngggnc aggncnnaat tgtttaaggg tccgaaaaat ccctccnaga aaaaaanctc      540
ccaggntgag nntngggttt nccccccccc canggcccct ctcgnanagt tggggtttgg      600
ggggcctggg atttntnttc ccctnttncc tcccccccc ccngggganag aggttngngt      660
tttgntcnnc ggccccnccn aaganctttn ccganttnan ttaaatccnt gcctnggcga      720
agtccnttgn agggntaaan ggccccctnn cggg                                 754
```

        <210> 21
        <211> 755
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(755)
        <223> n = A,T,C or G

        <400> 21

```
atcancccat gacccccnaac nngggaccnc tcanccggnc nnncnaccnc cggccnatca       60
nngtnagnnc actncnnttn natcacnccc cnccnactac gcccncnanc cnacgcncta      120
nncanatncc actganngcg cgangtngan ngagaaanct nataccanag ncaccanacn      180
ccagctgtcc nanaangcct nnnatacngg nnnatccaat ntgnancctc cnaagtattn      240
nncnncanat gattttcctn anccgattac ccntnccccc tancccctcc cccccaacna      300
cgaaggcnct ggccnaagg nngcgncncc ccgctagntc cccnncaagt cncncnccta      360
aactcanccn nattacncgc ttcntgagta tcactccccg aatctcaccc tactcaactc      420
aaaaanatcn gatacaaaat aatncaagcc tgnttatnac actntgactg ggtctctatt      480
```

```
ttagnggtcc ntnaancntc ctaatacttc cagtctncct tcnccaattt ccnaanggct    540
ctttcngaca gcatnttttg gttcccnntt gggttcttan ngaattgccc ttcntngaac    600
gggctcntct tttccttcgg ttancctggn ttcnnccggc cagttattat ttcccntttt    660
aaattcntnc cntttanttt tggcnttcna aaccccggc  cttgaaaacg gcccctggt     720
aaaaggttgt tttganaaaa tttttgtttt gttcc                              755
```

<210> 22
<211> 849
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(849)
<223> n = A,T,C or G

<400> 22

```
tttttttttt tttttangtg tngtcgtgca ggtagaggct tactacaant gtgaanacgt    60
acgctnggan taangcgacc cganttctag ganncnccct aaaatcanac tgtgaagatn    120
atcctgnnna cggaanggtc accggnngat nntgctaggg tgnccnctcc cannncnttn    180
cataactcng nggccctgcc caccaccttc ggcggcccng ngnccgggcc cgggtcattn    240
gnnttaaccn cactnngcna ncggtttccn nccccnncng acccnggcga tccggggtnc    300
tctgtcttcc cctgnagncn anaaantggg ccncggnccc ctttacccct nnacaagcca    360
cngccntcta nccncngccc ccctccant  nnggggact  gccnanngct ccgttnctng    420
nnaccccnnn gggtncctcg gttgtcgant cnaccgnang ccanggattc cnaaggaagg    480
tgcgttnttg gccctaccc  ttcgctncgg nncacccttc ccgacnanga nccgctcccg    540
cncnncgnng cctcncctcg caacacccgc nctcntcngt ncggnnnccc ccccaccccgc   600
nccctcncnc ngncgnancn ctccnccncc gtctcannca ccaccccgcc ccgccaggcc    660
ntcanccacn ggnngacnng nagcncnntc gcccgcgcn  gcgncncct  cgccncngaa    720
ctncntcngg ccantnncgc tcaanccnna cnaaacgccg ctgcgcggcc cgnagcgncc    780
ncctccncga gtcctcccgn cttccnaccc angnnttccn cgaggacacn nnaccccgcc    840
nncangcgg                                                          849
```

<210> 23
<211> 872
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(872)
<223> n = A,T,C or G

<400> 23

```
gcgcaaacta tacttcgctc gnactcgtgc gcctcgctnc tcttttcctc cgcaaccatg    60
tctgacnanc ccgattnggc ngatatcnan aagntcganc agtccaaact gantaacaca    120
cacacncnan aganaaatcc nctgccttcc anagtanacn attgaacnng agaaccangc    180
nggcgaatcg taatnaggcg tgcgccgcca atntgtcncc gtttattntn ccagcntcnc    240
ctnccnaccc tacntcttcn nagctgtcnn acccctngtn cgnacccccc naggtcggga    300
tcgggtttnn nntgaccgng cnnccctcc  ccccntccat nacganccnc ccgcaccacc    360
nanngcncgc ncccgnnct  cttcgccncc ctgtcctntn ccctgtngc  ctggcncngn    420
```

```
accgcattga ccctcgccnn ctncnngaaa ncgnanacgt ccgggttgnn annancgctg      480
tgggnnngcg tctgcnccgc gttccttccn ncnncttcca ccatcttcnt tacngggtct      540
ccncgccntc tcnnncacnc cctgggacgc tntcctntgc ccccccttnac tccccccctt     600
cgncgtgncc cgnccccacc ntcatttnca nacgntcttc acaannncct ggntnnctcc      660
cnancngncn gtcanccnag ggaaggggngg ggnnccnntg nttgacgttg nggngangtc     720
cgaanantcc tcnccntcan cnctaccccct cgggcgnnct ctcngttncc aacttancaa     780
ntctcccccg ngngcncntc tcagcctcnc ccnccccnct ctctgcantg tnctctgctc      840
tnaccnntac gantnttcgn cnccctcttt cc                                    872
```

```
<210> 24
<211> 815
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(815)
<223> n = A,T,C or G

<400> 24
gcatgcaagc ttgagtattc tatagngtca cctaaatanc ttggcntaat catggtcnta      60
nctgncttcc tgtgtcaaat gtatacnaan tanatatgaa tctnatntga caaganngta      120
tcntncatta gtaacaantg tnntgtccat cctgtcngan canattccca tnnattncgn      180
cgcattcncn gcncantatn taatngggaa ntcnnntnnn ncaccnncat ctatcntncc      240
gcnccctgac tggnagagat ggatnanttc tnntntgacc nacatgttca tcttggattn      300
aananccccc cgcngnccac cggttngnng cnagccnntc ccaagacctc ctgtggaggt      360
aacctgcgtc aganncatca aacntgggaa acccgcnncc angtnnaagt ngnnncanan      420
gatcccgtcc aggnttnacc atcccttcnc agcgcccct ttngtgcctt anagngnagc       480
gtgtccnanc cnctcaacat ganacgcgcc agnccanccg caattnggca caatgtcgnc      540
gaaccccta ggggganTna tncaaanccc caggattgtc cncncangaa atcccncanc       600
cccncccttac ccnncttttgg gacngtgacc aantcccgga gtnccagtcc ggccngnctc    660
ccccaccggt nnccntgggg gggtgaanct cngnntcanc cngncgaggn ntcgnaagga     720
accggncctn ggncgaanng ancnntcnga agngccncnt cgtataaccc ccctcncca      780
nccnacngnt agntccccc cnggggtncgg aangg                                 815
```

```
<210> 25
<211> 775
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(775)
<223> n = A,T,C or G

<400> 25
ccgagatgtc tcgctccgtg gccttagctg tgctcgcgct actctctctt tctggcctgg      60
aggctatcca gcgtactcca aagattcagg tttactcacg tcatccagca gagaatggaa       120
agtcaaattt cctgaattgc tatgtgtctg ggtttcatcc atccgacatt gaanttgact       180
tactgaagaa tgganagaga attgaaaaag tggagcattc agacttgtct ttcagcaagg        240
actggtcttt ctatctcntg tactacactg aattcacccc cactgaaaaa gatgagtatg         300
```

```
cctgccgtgt gaaccatgtg actttgtcac agcccaagat agttaagtgg gatcgagaca    360
tgtaagcagn cnncatggaa gtttgaagat gccgcatttg gattggatga attccaaatt    420
ctgcttgctt gcnttttaat antgatatgc ntatacaccc taccctttat gnccccaaat    480
tgtaggggtt acatnantgt tcncntngga catgatcttc ctttataant ccnccnttcg    540
aattgcccgt cncccngttn ngaatgtttc cnnaaccacg gttggctccc ccaggtcncc    600
tcttacggaa gggcctgggc cnctttncaa ggttggggga accnaaaatt tcncttntgc    660
ccncccncca cnntcttgng nncncanttt ggaacccttc cnattcccct tggcctcnna    720
nccttnncta anaaaacttn aaancgtngc naaanntttn acttccccec ttacc    775
```

        <210> 26
        <211> 820
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(820)
        <223> n = A,T,C or G

        <400> 26

```
anattantac agtgtaatct tttcccagag gtgtgtanag ggaacggggc ctagaggcat     60
cccanagata ncttatanca acagtgcttt gaccaagagc tgctgggcac atttcctgca    120
gaaaaggtgg cggtcccccat cactcctcct ctcccatagc catcccagag gggtgagtag    180
ccatcangcc ttcggtggga gggagtcang gaaacaacan accacagagc anacagacca    240
ntgatgacca tgggcgggag cgagcctctt ccctgnaccg gggtggcana nganagccta    300
nctgaggggt cacactataa acgttaacga ccnagatnan cacctgcttc aagtgcaccc    360
ttcctacctg acnaccagng accnnnaact gcngcctggg gacagcnctg ggancagcta    420
acnnagcact cacctgcccc cccatggccg tncgcntccc tggtcctgnc aagggaagct    480
ccctgttgga attncgggga naccaaggga nccccctcct ccanctgtga aggaaaaann    540
gatggaattt tncccttccg gccnntcccc tcttccttta cacgcccccct nntactcntc    600
tccctctntt ntcctgncnc actttttnacc ccnnnatttc ccttnattga tcggannctn    660
ganattccac tnncgcctnc cntcnatcng naanacnaaa nactntctna cccnggggat    720
gggnncctcg ntcatcctct ctttttcnct accnccnntt ctttgcctct ccttngatca    780
tccaaccntc gntggccntn cccccccnnn tcctttnccc    820
```
        <210> 27
        <211> 818
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(818)
        <223> n = A,T,C or G

        <400> 27

```
tctgggtgat ggcctcttcc tcctcaggga cctctgactg ctctgggcca aagaatctct     60
tgtttcttct ccgagcccca ggcagcggtg attcagccct gcccaacctg attctgatga    120
ctgcggatgc tgtgacggac ccaaggggca aataggggtc cagggtccag ggaggggcgc    180
ctgctgagca cttccgcccc tcaccctgcc cagccctgc catgagctct gggctgggtc    240
tccgcctcca gggttctgct cttccangca ngccancaag tggcgctggg ccacactggc    300
ttcttcctgc cccntccctg gctctgantc tctgtcttcc tgtcctgtgc angcnccttg    360
```

```
gatctcagtt  tccctcnctc  anngaactct  gtttctgann  tcttcantta  actntgantt      420
tatnaccnan  tggnctgtnc  tgtcnnactt  taatgggccn  gaccggctaa  tccctccctc      480
nctcccttcc  anttcnnnna  accngcttnc  cntcntctcc  ccntancccg  ccngggaanc      540
ctcctttgcc  ctnaccangg  gccnnaccg   cccntnnctn  gggggcnng   gtnnctncnc      600
ctgntnnccc  cnctcncnnt  tncctcgtcc  cnncnncgcn  nngcannttc  ncngtcccnn      660
tnnctcttcn  ngtntcgnaa  ngntcncntn  tnnnnngncn  ngntnntncn  tccctctcnc      720
cnnntgnang  tnnttnnnnc  ncngnncccc  nnnncnnnnn  nggnnntnnn  tctncncngc      780
cccnncccccc  ngnattaagg  cctccnntct  ccggccnc                              818
```

        <210> 28
        <211> 731
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(731)
        <223> n = A,T,C or G

        <400> 28
```
aggaagggcg  gagggatatt  gtangggatt  gagggatagg  agnataangg  gggaggtgtg       60
tcccaacatg  anggtgnngt  tctcttttga  angagggttg  ngtttttann  ccnggtgggt      120
gattnaaccc  cattgtatgg  agnnaaaggn  tttnagggat  ttttcggctc  ttatcagtat      180
ntanattcct  gtnaatcgga  aaatnatntt  tcnncnggaa  aatnttgctc  ccatccgnaa      240
attnctcccg  ggtagtgcat  nttnggggggn  cngccangtt  tcccaggctg  ctanaatcgt      300
actaaagntt  naagtgggan  tncaaatgaa  aacctnncac  agagnatccn  tacccgactg      360
tnnnttncct  tcgccctntg  actctgcnng  agcccaatac  ccnngngnat  gtcncccngn      420
nnngcgncnc  tgaaannnnc  tcgnggctnn  gancatcang  gggtttcgca  tcaaaagcnn      480
cgtttcncat  naaggcactt  tngcctcatc  caaccnctng  ccctcnncca  tttngccgtc      540
nggttcncct  acgctnntng  cncctnnntn  ganattttnc  ccgcctnggg  naancctcct      600
gnaatgggta  gggncttntc  tttttnaccnn  gnggtntact  aatcnnctnc  acgcntnctt      660
tctcnacccc  cccccttttt  caatcccanc  ggcnaatggg  gtctcccnn   cgangggggg      720
nnncccannc  c                                                            731
```

        <210> 29
        <211> 822
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(822)
        <223> n = A,T,C or G

        <400> 29
```
actagtccag  tgtggtggaa  ttccattgtg  ttgggggncnc  ttctatgant  antnttagat       60
cgctcanacc  tcacancctc  ccnacnangc  ctataangaa  nannaataga  nctgtncnnt      120
atntntacnc  tcatanncct  cnnnacccac  tccctcttaa  cccntactgt  gcctatngcn      180
tnnctantct  ntgccgcctn  cnanccaccn  gtgggccnac  cncnngnatt  ctcnatctcc      240
tcnccatntn  gcctananta  ngtncatacc  ctatacctac  nccaatgcta  nnnctaancn      300
tccatnantt  annntaacta  ccactgacnt  ngactttcnc  atnanctcct  aatttgaatc      360
```

```
tactctgact cccacngcct annnattagc ancntccccc nacnatntct caaccaaatc    420
ntcaacaacc tatctanctg ttcnccaacc nttncctccg atccccnnac aacccccctc    480
ccaaataccc nccacctgac ncctaacccn caccatcccg gcaagccnan ggncatttan    540
ccactggaat cacnatngga naaaaaaaac ccnaactctc tancncnnat ctccctaana    600
aatnctcctn naatttactn ncantnccat caancccacn tgaaacnnaa cccctgtttt    660
tanatccctt ctttcgaaaa ccnacccttt annncccaac ctttngggcc cccccnctnc    720
ccnaatgaag gncncccaat cnangaaacg nccntgaaaa ancnaggcna anannntccg    780
canatcctat cccttanttn ggggnccctt ncccngggcc cc                      822
```

```
        <210> 30
        <211> 787
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(787)
        <223> n = A,T,C or G

        <400> 30
cggccgcctg ctctggcaca tgcctcctga atggcatcaa aagtgatgga ctgcccattg     60
ctagagaaga ccttctctcc tactgtcatt atggagccct gcagactgag ggctcccctt    120
gtctgcagga tttgatgtct gaagtcgtgg agtgtggctt ggagctcctc atctacatna    180
gctggaagcc ctggagggcc tctctcgcca gcctcccccт tctctccacg ctctccangg    240
acaccagggg ctccaggcag cccattattc ccagnangac atggtgtttc tccacgcgga    300
cccatggggc ctgnaaggcc agggtctcct ttgacaccat ctctcccgtc ctgcctggca    360
ggccgtggga tccactantt ctanaacggn cgccaccncg gtgggagctc cagcttttgt    420
tcccnttaat gaaggttaat tgcncgcttg gcgtaatcat nggtcanaac tntttcctgt    480
gtgaaattgt ttntcccctc ncnattccnc ncnacatacn aacccggaan cataaagtgt    540
taaagcctgg gggtngcctn nngaatnaac tnaactcaat taattgcgtt ggctcatggc    600
ccgctttccn ttcnggaaaa ctgtcntccc ctgcnttnnt gaatcggcca ccccccnggg    660
aaaagcggtt tgcntttttng ggggntcctt ccncttcccc cctcnctaan ccctncgcct    720
cggtcgttnc nggtngcggg gaangggnat nnnctcccnc naagggggng agnnngntat    780
ccccaaa                                                             787
```

```
        <210> 31
        <211> 799
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(799)
        <223> n = A,T,C or G

        <400> 31
tttttttttt tttttttggc gatgctactg tttaattgca ggaggtgggg gtgtgtgtac     60
catgtaccag ggctattaga agcaagaagg aaggagggag ggcagagcgc cctgctgagc    120
aacaaaggac tcctgcagcc ttctctgtct gtctcttggc gcaggcacat ggggaggcct    180
cccgcagggt gggggccacc agtccagggg tgggagcact acanggggtg ggagtgggtg    240
gtggctggtn cnaatggcct gncacanantc cctacgattc ttgacacctg gatttcacca    300
```

```
ggggaccttc tgttctccca nggnaacttc ntnnatctcn aaagaacaca actgtttctt      360
cngcanttct ggctgttcat ggaaagcaca ggtgtccnat ttnggctggg acttggtaca      420
tatggttccg gcccacctct cccntcnaan aagtaattca ccccccccn ccntctnttg      480
cctgggccct taantaccca caccggaact canttantta ttcatcttng gntgggcttg      540
ntnatcnccn cctgaangcg ccaagttgaa aggccacgcc gtnccnctc cccatagnan      600
nttttnncnt canctaatgc ccccccnggc aacnatccaa tcccccccn tgggggcccc      660
agcccanggc ccccgnctcg ggnnnccngn cncgnantcc ccaggntctc ccantcngnc      720
ccnnngcncc cccgcacgca gaacanaagg ntngagccnc cgcannnnnn nggtnncnac      780
ctcgcccccc ccnncgnng                                                   799
```

        <210> 32
        <211> 789
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(789)
        <223> n = A,T,C or G

        <400> 32

```
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt       60
ttttnccnag ggcaggttta ttgacaacct cncgggacac aancaggctg gggacaggac      120
ggcaacaggc tccggcggcg gcggcggcgg ccctacctgc ggtaccaaat ntgcagcctc      180
cgctcccgct tgatnttcct ctgcagctgc aggatgccnt aaaacagggc ctcggccntn      240
ggtgggcacc ctgggatttn aatttccacg ggcacaatgc ggtcgcancc cctcaccacc      300
nattaggaat agtggtntta cccnccnccg ttggcncact ccccntggaa accacttntc      360
gcggctccgg catctggtct taaaccttgc aaacnctggg gccctctttt tggttantnt      420
nccngccaca atcatnactc agactggcnc gggctggccc caaaaaaancn ccccaaaacc      480
ggnccatgtc ttnncggggt tgctgcnatn tncatcacct cccgggcnca ncaggncaac      540
ccaaaagttc ttgnggcccn caaaaaanct ccgggggggnc ccagtttcaa caaagtcatc      600
cccccttggcc cccaaatcct cccccccgntt nctgggtttg ggaacccacg cctctnnctt      660
tggnnggcaa gntggntccc ccttcgggcc cccggtgggc ccnnctctaa ngaaaacncc      720
ntcctnnnca ccatcccccc nngnnacgnc tancaangna tccctttttt tanaaacggg      780
cccccccncg                                                            789
```

        <210> 33
        <211> 793
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(793)
        <223> n = A,T,C or G

        <400> 33

```
gacagaacat gttggatggt ggagcacctt tctatacgac ttacaggaca gcagatgggg       60
aattcatggc tgttggagca atanaacccc agttctacga gctgctgatc aaaggacttg      120
gactaaagtc tgatgaactt cccaatcaga tgagcatgga tgattggcca gaaatgaana      180
agaagtttgc agatgtattt gcaaagaaga cgaaggcaga gtggtgtcaa atctttgacg      240
```

```
gcacagatgc ctgtgtgact ccggttctga cttttgagga ggttgttcat catgatcaca      300
acaangaacg gggctcgttt atcaccantg aggagcagga cgtgagcccc cgccctgcac      360
ctctgctgtt aaacacccca gccatccctt ctttcaaaag ggatccacta cttctagagc      420
ggncgccacc gcggtggagc tccagctttt gttcccttta gtgagggtta attgcgcgct      480
tggcgtaatc atggtcatan ctgtttcctg tgtgaaattg ttatccgctc acaattccac      540
acaacatacg anccggaagc atnaaatttt aaagcctggn ggtngcctaa tgantgaact      600
nactcacatt aattggcttt gcgctcactg cccgctttcc agtccggaaa acctgtcctt      660
gccagctgcc nttaatgaat cnggccaccc cccggggaaa aggcngtttg cttnttgggg      720
cgcncttccc gctttctcgc ttcctgaant ccttcccccc ggtctttcgg cttgcggcna      780
acggtatcna cct                                                         793
```

```
<210> 34
<211> 756
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(756)
<223> n = A,T,C or G

<400> 34
gccgcgaccg gcatgtacga gcaactcaag ggcgagtgga accgtaaaag ccccaatctt      60
ancaagtgcg gggaanagct gggtcgactc aagctagttc ttctggagct caacttcttg      120
ccaaccacag ggaccaagct gaccaaacag cagctaattc tggcccgtga catactggag      180
atcggggccc aatggagcat cctacgcaan gacatcccct ccttcgagcg ctacatggcc      240
cagctcaaat gctactactt tgattacaan gagcagctcc ccgagtcagc ctatatgcac      300
cagctcttgg gcctcaacct cctcttcctg ctgtcccaga accgggtggc tgantnccac      360
acgganttgg ancggctgcc tgcccaanga catacanacc aatgtctaca tcnaccacca      420
gtgtcctgga gcaatactga tgganggcag ctaccncaaa gtnttcctgg ccnagggtaa      480
catcccccgc cgagagctac accttcttca ttgacatcct gctcgacact atcagggatg      540
aaaatcgcng ggttgctcca gaaaggctnc aanaanatcc ttttcnctga aggccccccgg      600
atncnctagt nctagaatcg gcccgccatc gcggtgganc ctccaacctt tcgttnccct      660
ttactgaggg ttnattgccg cccttggcgt tatcatggtc acnccngttn cctgtgttga      720
aattnttaac cccccacaat tccacgccna cattng                               756
```

```
<210> 35
<211> 834
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(834)
<223> n = A,T,C or G

<400> 35
ggggatctct anatcnacct gnatgcatgg ttgtcggtgt ggtcgctgtc gatgaanatg      60
aacaggatct tgcccttgaa gctctcggct gctgtnttta agttgctcag tctgccgtca      120
tagtcagaca cnctcttggg caaaaaacan caggatntga gtcttgattt cacctccaat      180
aatcttcngg gctgtctgct cggtgaactc gatgacnang ggcagctggt tgtgtntgat      240
```

```
aaantccanc angttctcct tggtgacctc cccttcaaag ttgttccggc cttcatcaaa        300
cttctnnaan angannancc canctttgtc gagctggnat ttgganaaca cgtcactgtt        360
ggaaactgat cccaaatggt atgtcatcca tcgcctctgc tgcctgcaaa aaacttgctt        420
ggcncaaatc cgactccccn tccttgaaag aagccnatca cacccccctc cctggactcc        480
nncaangact ctnccgctnc cccntccnng cagggttggt ggcannccgg gcccntgcgc        540
ttcttcagcc agttcacnat nttcatcagc ccctctgcca gctgttntat tccttggggg        600
ggaanccgtc tctcccttcc tgaannaact ttgaccgtng gaatagccgc gcntcnccnt        660
acntnctggg ccgggttcaa antccctccn ttgncnntcn cctcgggcca ttctggattt        720
nccnaacttt ttccttcccc cncccncgg ngtttggntt tttcatnggg ccccaactct        780
gctnttggcc antcccctgg gggcntntan cnccccctnt ggtcccntng ggcc            834
```

```
        <210> 36
        <211> 814
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(814)
        <223> n = A,T,C or G

        <400> 36
cggncgcttt ccngccgcgc cccgtttcca tgacnaaggc tcccttcang ttaaatacnn         60
cctagnaaac attaatgggt tgctctacta atacatcata cnaaccagta agcctgccca        120
naacgccaac tcaggccatt cctaccaaag gaagaaaggc tggtctctcc acccccctgta       180
ggaaaggcct gccttgtaag acaccacaat ncggctgaat ctnaagtctt gtgttttact        240
aatggaaaaa aaaaataaac aanaggtttt gttctcatgg ctgcccaccg cagcctggca        300
ctaaaacanc ccagcgctca cttctgcttg ganaaatatt ctttgctctt ttggacatca        360
ggcttgatgg tatcactgcc acntttccac ccagctgggc nccettcccc catntttgtc        420
antganctgg aaggcctgaa ncttagtctc caaaagtctc ngcccacaag accggccacc        480
aggggangtc ntttncagtg gatctgccaa anantacccn tatcatcnnt gaataaaaag        540
gcccctgaac ganatgcttc cancancctt taagacccat aatcctngaa ccatggtgcc        600
cttccggtct gatccnaaag gaatgttcct gggtcccant ccctcctttg ttncttacgt        660
tgtnttggac ccntgctngn atnacccaan tganatcccc ngaagcaccc tnccectggc        720
atttganttt cntaaattct ctgccctacn nctgaaagca cnattccctn ggcnccnaan       780
ggngaactca agaaggtctn ngaaaaacca cncn                                   814
```

```
        <210> 37
        <211> 760
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(760)
        <223> n = A,T,C or G

        <400> 37
gcatgctgct cttcctcaaa gttgttcttg ttgccataac aaccaccata ggtaaagcgg         60
gcgcagtgtt cgctgaaggg gttgtagtac cagcgcggga tgctctcctt gcagagtcct        120
gtgtctggca ggtccacgca atgccctttg tcactgggga aatggatgcg ctggagctcg        180
```

```
tcnaanccac tcgtgtattt ttcacangca gcctcctccg aagcntccgg gcagttgggg    240
gtgtcgtcac actccactaa actgtcgatn cancagccca ttgctgcagc ggaactgggt    300
gggctgacag gtgccagaac acactggatn ggcctttcca tggaagggcc tgggggaaat    360
cncctnancc caaactgcct ctcaaaggcc accttgcaca ccccgacagg ctagaaatgc    420
actcttcttc ccaaaggtag ttgttcttgt tgcccaagca ncctccanca aaccaaaanc    480
ttgcaaaatc tgctccgtgg gggtcatnnn taccanggtt ggggaaanaa acccggcngn    540
ganccncctt gtttgaatgc naaggnaata atcctcctgt cttgcttggg tggaanagca    600
caattgaact gttaacnttg ggccgngttc cnctngggtg gtctgaaact aatcaccgtc    660
actggaaaaa ggtangtgcc ttccttgaat tcccaaantt cccctngntt tgggtnnttt    720
ctcctctncc ctaaaaatcg tnttcccccc ccntanggcg                          760
```

        <210> 38
        <211> 724
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(724)
        <223> n = A,T,C or G

        <400> 38
```
tttttttttt tttttttttt tttttttttt tttttaaaaa ccccctccat tgaatgaaaa     60
cttccnaaat tgtccaaccc cctcnnccaa atnnccattt ccgggggggg gttccaaacc    120
caaattaatt ttgganttta aattaaatnt tnattngggg aanaanccaa atgtnaagaa    180
aatttaaccc attatnaact taaatncctn gaaacccntg gnttccaaaa atttttaacc    240
cttaaatccc tccgaaattg ntaanggaaa accaaattcn cctaaggctn tttgaaggtt    300
ngatttaaac cccccttnant tnttttnacc cnngnctnaa ntatttngnt tccggtgttt    360
tcctnttaan cntnggtaac tcccgntaat gaannnccct aanccaatta aaccgaattt    420
ttttttgaatt ggaaattccn ngggaattna ccggggtttt tcccntttgg gggccatncc    480
cccnctttcg gggtttgggn ntaggttgaa ttttttnnang ncccaaaaaa nccccccaana    540
aaaaaactcc caagnnttaa ttngaatntc cccccttccca ggccttttgg gaaaggnggg    600
tttntggggg ccngggantt cnttcccccn ttnccncccc ccccccnggt aaanggttat    660
ngnntttggt ttttgggccc cttnanggac cttccggatn gaaattaaat cccccgggncg    720
gccg                                                                 724
```

        <210> 39
        <211> 751
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(751)
        <223> n = A,T,C or G

        <400> 39
```
tttttttttt tttttctttg ctcacattta atttttattt tgattttttt taatgctgca     60
caacacaata tttatttcat ttgtttcttt tatttcattt tatttgtttg ctgctgctgt    120
tttatttatt tttactgaaa gtgagaggga acttttgtgg cctttttttcc ttttttctgta    180
ggccgcctta agctttctaa atttggaaca tctaagcaag ctgaanggaa aaggggggttt    240
```

```
cgcaaaatca ctcggggggaa nggaaaggtt gctttgttaa tcatgcccta tggtgggtga      300
ttaactgctt gtacaattac ntttcacttt taattaattg tgctnaangc tttaattana      360
cttggggggtt ccctccccan accaacccccn ctgacaaaaa gtgccngccc tcaaatnatg     420
tcccggcnnt cnttgaaaca cacngcngaa ngttctcatt ntccccncnc caggtnaaaa      480
tgaagggtta ccatntttaa cnccacctcc acntggcnnn gcctgaatcc tcnaaaancn      540
ccctcaancn aattnctnng ccccggtcnc gcntnngtcc cnccccgggct ccgggaantn      600
caccccccnga anncnntnnc naacnaaatt ccgaaaatat tcccnntcnc tcaattcccc     660
cnnagactnt cctcnncnan cncaatttc  ttttnntcac gaacncgnnc cnnaaaatgn      720
nnnncnccctc cnctngtccn naatcnccan c                                   751
```

```
        <210> 40
        <211> 753
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(753)
        <223> n = A,T,C or G

        <400> 40
gtggtatttt ctgtaagatc aggtgttcct ccctcgtagg tttagaggaa acaccctcat       60
agatgaaaac ccccccgaga cagcagcact gcaactgcca agcagccggg gtaggaggggg      120
cgccctatgc acagctgggc ccttgagaca gcagggcttc gatgtcaggc tcgatgtcaa      180
tggtctggaa gcggcggctg tacctgcgta ggggcacacc gtcagggccc accaggaact      240
tctcaaagtt ccaggcaacn tcgttgcgac acaccggaga ccaggtgatn agcttggggt      300
cggtcataan cgcggtggcg tcgtcgctgg gagctggcag ggcctcccgc aggaaggcna      360
ataaaaggtg cgcccccgca ccgttcanct cgcacttctc naanaccatg angttgggct      420
cnaacccacc accannccgg acttccttga nggaattccc aaatctcttc gntcttgggc      480
ttctnctgat gccctanctg gttgcccngn atgccaanca nccccaancc ccggggtcct      540
aaancacccn cctcctcntt tcatctgggt tnttntcccc ggaccntggt tcctctcaag      600
gganccccata tctcnaccan tactcaccnt nccccccccnt gnnacccaanc cttctanngn     660
ttcccnccccg ncctctggcc cntcaaanan gcttncacna cctgggtctg ccttcccccc      720
tncccctatct gnaccccncn tttgtctcan tnt                                  753
```

```
        <210> 41
        <211> 341
        <212> DNA
        <213> Homo sapien

        <400> 41
actatatcca tcacaacaga catgcttcat cccatagact tcttgacata gcttcaaatg       60
agtgaacccca tccttgattt atatacatat atgttctcag tattttggga gcctttccac      120
ttctttaaac cttgttcatt atgaacactg aaaataggaa tttgtgaaga gttaaaaagt      180
tatagcttgt ttacgtagta agttttttgaa gtctacattc aatccagaca cttagttgag      240
tgttaaactg tgattttttaa aaaatatcat ttgagaatat tctttcagag gtattttcat     300
ttttactttt tgattaattg tgtttttatat attagggtag t                        341
```

```
        <210> 42
        <211> 101
        <212> DNA
```

<213> Homo sapien

<400> 42
acttactgaa tttagttctg tgctcttcct tatttagtgt tgtatcataa atactttgat   60
gtttcaaaca ttctaaataa ataattttca gtggcttcat a   101

<210> 43
<211> 305
<212> DNA
<213> Homo sapien

<400> 43
acatctttgt tacagtctaa gatgtgttct taaatcacca ttccttcctg gtcctcaccc   60
tccagggtgg tctcacactg taattagagc tattgaggag tctttacagc aaattaagat   120
tcagatgcct tgctaagtct agagttctag agttatgttt cagaaagtct aagaaaccca   180
cctcttgaga ggtcagtaaa gaggacttaa tatttcatat ctacaaaatg accacaggat   240
tggatacaga acgagagtta tcctggataa ctcagagctg agtacctgcc cggggggccgc   300
tcgaa   305

<210> 44
<211> 852
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(852)
<223> n = A,T,C or G

<400> 44
acataaatat cagagaaaag tagtctttga aatatttacg tccaggagtt ctttgtttct   60
gattatttgg tgtgtgtttt ggtttgtgtc caaagtattg gcagcttcag ttttcatttt   120
ctctccatcc tcgggcattc ttcccaaatt tatataccag tcttcgtcca tccacacgct   180
ccagaatttc tcttttgtag taatatctca tagctcggct gagcttttca taggtcatgc   240
tgctgttgtt cttctttta ccccatagct gagccactgc ctctgatttc aagaacctga   300
agacgccctc agatcggtct tcccatttta ttaatcctgg gttcttgtct gggttcaaga   360
ggatgtcgcg gatgaattcc cataagtgag tccctctcgg gttgtgcttt ttggtgtggc   420
acttggcagg ggggtcttgc tccttttca tatcaggtga ctctgcaaca ggaaggtgac   480
tggtggttgt catggagatc tgagcccggc agaaagtttt gctgtccaac aaatctactg   540
tgctaccata gttggtgtca tataaatagt tctngtcttt ccaggtgttc atgatggaag   600
gctcagtttg ttcagtcttg acaatgacat tgtgtgtgga ctggaacagg tcactactgc   660
actggccgtt ccacttcaga tgctgcaagt tgctgtagag gagntgcccc gccgtccctg   720
ccgccgggt gaactcctgc aaactcatgc tgcaaaggtg ctcgccgttg atgtcgaact   780
cntggaaagg gatacaattg gcatccagct ggttggtgtc caggaggtga tggagccact   840
cccacacctg gt   852

<210> 45
<211> 234
<212> DNA
<213> Homo sapien

```
<400> 45
acaacagacc cttgctcgct aacgacctca tgctcatcaa gttggacgaa tccgtgtccg        60
agtctgacac catccggagc atcagcattg cttcgcagtg ccctaccgcg gggaactctt       120
gcctcgtttc tggctggggt ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg       180
tgaacgtgtc ggtggtgtct gaggaggtct gcagtaagct ctatgacccg ctgt            234


    <210> 46
    <211> 590
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(590)
    <223> n = A,T,C or G


    <400> 46
actttttatt taaatgttta taaggcagat ctatgagaat gatagaaaac atggtgtgta        60
atttgatagc aatattttgg agattacaga gttttagtaa ttaccaatta cacagttaaa       120
aagaagataa tatattccaa gcanatacaa aatatctaat gaaagatcaa ggcaggaaaa       180
tgantataac taattgacaa tggaaaatca attttaatgt gaattgcaca ttatccttta       240
aaagctttca aaanaaanaa ttattgcagt ctanttaatt caaacagtgt taaatggtat       300
caggataaan aactgaaggg canaaagaat taattttcac ttcatgtaac ncacccanat       360
ttacaatggc ttaaatgcan ggaaaaagca gtggaagtag ggaagtantc aaggtctttc       420
tggtctctaa tctgccttac tctttgggtg tggctttgat cctctggaga cagctgccag       480
ggctcctgtt atatccacaa tcccagcagc aagatgaagg gatgaaaaag gacacatgct       540
gccttccttt gaggagactt catctcactg gccaacactc agtcacatgt                 590


    <210> 47
    <211> 774
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(774)
    <223> n = A,T,C or G


    <400> 47
acaaggggggc ataatgaagg agtggggana gattttaaag aaggaaaaaa aacgaggccc        60
tgaacagaat tttcctgnac aacggggctt caaaataatt ttcttgggga ggttcaagac       120
gcttcactgc ttgaaactta aatggatgtg ggacanaatt ttctgtaatg accctgaggg       180
cattacagac gggactctgg gaggaaggat aaacagaaag gggacaaagg ctaatcccaa       240
aacatcaaag aaaggaaggt ggcgtcatac ctcccagcct acacagttct ccagggctct       300
cctcatccct ggaggacgac agtggaggaa caactgacca tgtccccagg ctcctgtgtg       360
ctggctcctg gtcttcagcc cccagctctg gaagcccacc ctctgctgat cctgcgtggc       420
ccacactcct tgaacacaca tccccaggtt atattcctgg acatggctga acctcctatt       480
cctacttccg agatgccttg ctccctgcag cctgtcaaaa tcccactcac cctccaaacc       540
acggcatggg aagcctttct gacttgcctg attactccag catcttggaa caatccctga       600
ttccccactc cttagaggca agatagggtg gttaagagta gggctggacc acttggagcc       660
aggctgctgg cttcaaattn tggctcattt acgagctatg ggaccttggg caagtnatct       720
```

```
tcacttctat gggcntcatt ttgttctacc tgcaaaatgg gggataataa tagt          774
```

```
        <210> 48
        <211> 124
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(124)
        <223> n = A,T,C or G

        <400> 48
canaaattga aattttataa aaaggcattt ttctcttata tccataaaat gatataattt    60
ttgcaantat anaaatgtgt cataaattat aatgttcctt aattacagct caacgcaact    120
tggt                                                                 124

        <210> 49
        <211> 147
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(147)
        <223> n = A,T,C or G

        <400> 49
gccgatgcta ctattttatt gcaggaggtg ggggtgtttt tattattctc tcaacagctt    60
tgtggctaca ggtggtgtct gactgcatna aaaanttttt tacgggtgat tgcaaaaatt    120
ttagggcacc catatcccaa gcantgt                                        147

        <210> 50
        <211> 107
        <212> DNA
        <213> Homo sapien

        <400> 50
acattaaatt aataaaagga ctgttggggt tctgctaaaa cacatggctt gatatattgc    60
atggtttgag gttaggagga gttaggcata tgttttggga gagggt                   107

        <210> 51
        <211> 204
        <212> DNA
        <213> Homo sapien

        <400> 51
gtcctaggaa gtctagggga cacacgactc tggggtcacg gggccgacac acttgcacgg    60
cgggaaggaa aggcagagaa gtgacaccgt caggggaaa tgacagaaag gaaaatcaag     120
gccttgcaag gtcagaaagg ggactcaggg cttccaccac agccctgccc cacttggcca    180
cctcccttt gggaccagca atgt                                            204
```

```
<210> 52
<211> 491
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(491)
<223> n = A,T,C or G

<400> 52
acaaagataa catttatctt ataacaaaaa tttgatagtt ttaaaggtta gtattgtgta      60
gggtattttc caaaagacta aagagataac tcaggtaaaa agttagaaat gtataaaaca     120
ccatcagaca ggtttttaaa aaacaacata ttacaaaatt agacaatcat ccttaaaaaa     180
aaaacttctt gtatcaattt cttttgttca aaatgactga cttaantatt tttaaatatt     240
tcanaaacac ttcctcaaaa attttcaana tggtagcttt canatgtncc ctcagtccca     300
atgttgctca gataaataaa tctcgtgaga acttaccacc caccacaagc tttctggggc     360
atgcaacagt gtcttttctt tnctttttct ttttttttt ttacaggcac agaaactcat      420
caattttatt tggataacaa agggtctcca aattatattg aaaaataaat ccaagttaat     480
atcactcttg t                                                          491


<210> 53
<211> 484
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(484)
<223> n = A,T,C or G

<400> 53
acataattta gcagggctaa ttaccataag atgctattta ttaanaggtn tatgatctga      60
gtattaacag ttgctgaagt ttggtatttt tatgcagcat tttcttttg ctttgataac      120
actacagaac ccttaaggac actgaaaatt agtaagtaaa gttcagaaac attagctgct     180
caatcaaatc tctacataac actatagtaa ttaaaacgtt aaaaaaaagt gttgaaatct     240
gcactagtat anaccgctcc tgtcaggata anactgcttt ggaacagaaa gggaaaaanc     300
agctttgant ttctttgtgc tgatangagg aaaggctgaa ttaccttgtt gcctctccct     360
aatgattggc aggtcnggta aatnccaaaa catattccaa ctcaacactt cttttccncg     420
tancttgant ctgtgtattc caggancagg cggatggaat gggccagccc ncggatgttc     480
cant                                                                  484


<210> 54
<211> 151
<212> DNA
<213> Homo sapien

<400> 54
actaaacctc gtgcttgtga actccataca gaaaacggtg ccatccctga acacggctgg      60
ccactgggta tactgctgac aaccgcaaca acaaaaacac aaatccttgg cactggctag     120
```

```
tctatgtcct ctcaagtgcc tttttgtttg t                               151
```

```
    <210> 55
    <211> 91
    <212> DNA
    <213> Homo sapien

    <400> 55
acctggcttg tctccgggtg gttcccggcg cccccacgg tccccagaac ggacactttc    60
gccctccagt ggatactcga gccaaagtgg t                                 91

    <210> 56
    <211> 133
    <212> DNA
    <213> Homo sapien

    <400> 56
ggcggatgtg cgttggttat atacaaatat gtcattttat gtaagggact tgagtatact   60
tggatttttg gtatctgtgg gttgggggga cggtccagga accaataccc catggatacc  120
aagggacaac tgt                                                     133

    <210> 57
    <211> 147
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(147)
    <223> n = A,T,C or G

    <400> 57
actctggaga acctgagccg ctgctccgcc tctgggatga ggtgatgcan gcngtggcgc   60
gactgggagc tgagcccttc cctttgcgcc tgcctcagag gattgttgcc gacntgcana  120
tctcantggg ctggatncat gcaggt                                      147

    <210> 58
    <211> 198
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(198)
    <223> n = A,T,C or G

    <400> 58
acagggatat aggtttnaag ttattgtnat tgtaaaatac attgaatttt ctgtatactc   60
tgattacata catttatcct ttaaaaaaga tgtaaatctt aatttttatg ccatctatta  120
atttaccaat gagttacctt gtaaatgaga agtcatgata gcactgaatt ttaactagtt  180
ttgacttcta agtttggt                                               198
```

```
<210> 59
<211> 330
<212> DNA
<213> Homo sapien

<400> 59
acaacaaatg ggttgtgagg aagtcttatc agcaaaactg gtgatggcta ctgaaaagat        60
ccattgaaaa ttatcattaa tgattttaaa tgacaagtta tcaaaaactc actcaatttt       120
cacctgtgct agcttgctaa aatgggagtt aactctagag caaatatagt atcttctgaa       180
tacagtcaat aaatgacaaa gccagggcct acaggtggtt tccagacttt ccagacccag       240
cagaaggaat ctatttatc acatggatct ccgtctgtgc tcaaaatacc taatgatatt        300
tttcgtcttt attggacttc tttgaagagt                                        330


<210> 60
<211> 175
<212> DNA
<213> Homo sapien

<400> 60
accgtgggtg ccttctacat tcctgacggc tccttcacca acatctggtt ctacttcggc        60
gtcgtgggct ccttcctctt catcctcatc cagctggtgc tgctcatcga ctttgcgcac       120
tcctggaacc agcggtggct gggcaaggcc gaggagtgcg attcccgtgc ctggt            175


<210> 61
<211> 154
<212> DNA
<213> Homo sapien

<400> 61
accccacttt tcctcctgtg agcagtctgg acttctcact gctacatgat gagggtgagt        60
ggttgttgct cttcaacagt atcctcccct ttccggatct gctgagccgg acagcagtgc       120
tggactgcac agccccgggg ctccacattg ctgt                                   154


<210> 62
<211> 30
<212> DNA
<213> Homo sapien

<400> 62
cgctcgagcc ctatagtgag tcgtattaga                                         30


<210> 63
<211> 89
<212> DNA
<213> Homo sapien

<400> 63
acaagtcatt tcagcaccct ttgctcttca aaactgacca tcttttatat ttaatgcttc        60
ctgtatgaat aaaaatggtt atgtcaagt                                          89
```

```
<210> 64
<211> 97
<212> DNA
<213> Homo sapien

<400> 64
accggagtaa ctgagtcggg acgctgaatc tgaatccacc aataaataaa ggttctgcag        60
aatcagtgca tccaggattg gtccttggat ctggggt                                 97


<210> 65
<211> 377
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G

<400> 65
acaacaanaa ntcccttctt taggccactg atggaaacct ggaaccccct tttgatggca        60
gcatggcgtc ctaggccttg acacagcggc tggggtttgg gctntcccaa accgcacacc       120
ccaaccctgg tctacccaca nttctggcta tgggctgtct ctgccactga acatcagggt       180
tcggtcataa natgaaatcc caanggggac agaggtcagt agaggaagct caatgagaaa       240
ggtgctgttt gctcagccag aaaacagctg cctggcattc gccgctgaac tatgaacccg       300
tgggggtgaa ctacccccan gaggaatcat gcctgggcga tgcaanggtg ccaacaggag       360
gggcgggagg agcatgt                                                      377


<210> 66
<211> 305
<212> DNA
<213> Homo sapien

<400> 66
acgcctttcc ctcagaattc agggaagaga ctgtcgcctg ccttcctccg ttgttgcgtg        60
agaacccgtg tgccccttcc caccatatcc accctcgctc catctttgaa ctcaaacacg       120
aggaactaac tgcaccctgg tcctctcccc agtccccagt tcaccctcca tccctcacct       180
tcctccactc taagggatat caacactgcc cagcacaggg gccctgaatt tatgtggttt       240
ttatatattt tttaataaga tgcactttat gtcatttttt aataaagtct gaagaattac       300
tgttt                                                                   305


<210> 67
<211> 385
<212> DNA
<213> Homo sapien

<400> 67
actacacaca ctccacttgc ccttgtgaga cactttgtcc cagcacttta ggaatgctga        60
ggtcggacca gccacatctc atgtgcaaga ttgcccagca gacatcaggt ctgagagttc       120
ccctttaaa aaaggggact tgcttaaaaa agaagtctag ccacgattgt gtagagcagc       180
tgtgctgtgc tggagattca cttttgagag agttctcctc tgagacctga tctttagagg       240
```

```
ctgggcagtc ttgcacatga gatggggctg gtctgatctc agcactcctt agtctgcttg    300
cctctcccag ggccccagcc tggccacacc tgcttacagg gcactctcag atgcccatac    360
catagtttct gtgctagtgg accgt                                          385
```

```
        <210> 68
        <211> 73
        <212> DNA
        <213> Homo sapien


        <400> 68
acttaaccag atatattttt accccagatg gggatattct ttgtaaaaaa tgaaaataaa     60
gttttttttaa tgg                                                       73


        <210> 69
        <211> 536
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(536)
        <223> n = A,T,C or G


        <400> 69
actagtccag tgtggtggaa ttccattgtg ttggggctc tcaccctcct ctcctgcagc      60
tccagctttg tgctctgcct ctgaggagac catggcccag catctgagta ccctgctgct    120
cctgctggcc accctagctg tggccctggc ctggagcccc aaggaggagg ataggataat    180
cccgggtggc atctataacg cagacctcaa tgatgagtgg gtacagcgtg cccttcactt    240
cgccatcagc gagtataaca aggccaccaa agatgactac tacagacgtc cgctgcgggt    300
actaagagcc aggcaacaga ccgttggggg ggtgaattac ttcttcgacg tagaggtggg    360
ccgaaccata tgtaccaagt cccagcccaa cttggacacc tgtgccttcc atgaacagcc    420
agaactgcag aagaaacagt tgtgctcttt cgagatctac gaagttccct ggggagaaca    480
gaangtccct gggtgaaatc caggtgtcaa gaaatcctan ggatctgttg ccaggc        536


        <210> 70
        <211> 477
        <212> DNA
        <213> Homo sapien
        <400> 70
atgacccta acagggccc tctcagccct cctaatgacc tccggcctag ccatgtgatt        60
tcacttccac tccataacgc tcctcatact aggcctacta accaacacac taaccatata    120
ccaatgatgg cgcgatgtaa cacgagaaag cacataccaa ggccaccaca caccacctgt    180
ccaaaaaggc cttcgatacg ggataatcct atttattacc tcagaagttt ttttcttcgc    240
agggattttt ctgagccttt taccactcca gcctagcccc tacccccaa ctaggagggc     300
actggccccc aacaggcatc accccgctaa atccctaga agtcccactc ctaaacacat     360
ccgtattact cgcatcagga gtatcaatca cctgagctca ccatagtcta atagaaaaca    420
accgaaacca aattattcaa agcactgctt attacaattt tactgggtct ctatttt       477


        <210> 71
        <211> 533
        <212> DNA
```

```
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(533)
<223> n = A,T,C or G

<400> 71
agagctatag gtacagtgtg atctcagctt tgcaaacaca ttttctacat agatagtact        60
aggtattaat agatatgtaa agaaagaaat cacaccatta ataatggtaa gattggttta       120
tgtgatttta gtggtatttt tggcaccctt atatatgttt tccaaacttt cagcagtgat       180
attatttcca taacttaaaa agtgagtttg aaaaagaaaa tctccagcaa gcatctcatt       240
taaataaagg tttgtcatct ttaaaaatac agcaatatgt gactttttaa aaaagctgtc       300
aaataggtgt gaccctacta ataattatta gaaatacatt taaaaacatc gagtacctca       360
agtcagtttg ccttgaaaaa tatcaaatat aactcttaga gaaatgtaca taaaagaatg       420
cttcgtaatt ttggagtang aggttccctc ctcaattttg tattttaaa aagtacatgg        480
taaaaaaaa aattcacaac agtatataag gctgtaaaat gaagaattct gcc               533


<210> 72
<211> 511
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(511)
<223> n = A,T,C or G

<400> 72
tattacggaa aaacacacca cataattcaa ctancaaaga anactgcttc agggcgtgta        60
aaatgaaagg cttccaggca gttatctgat taaagaacac taaaagaggg acaaggctaa       120
aagccgcagg atgtctacac tatancaggc gctatttggg ttggctggag gagctgtgga       180
aaacatggan agattggtgc tgganatcgc cgtggctatt cctcattgtt attacanagt       240
gaggttctct gtgtgcccac tggtttgaaa accgttctnc aataatgata gaatagtaca       300
cacatgagaa ctgaaatggc ccaaacccag aaagaaagcc caactagatc ctcagaanac       360
gcttctaggg acaataaccg atgaagaaaa gatggcctcc ttgtgccccc gtctgttatg       420
atttctctcc attgcagcna naaacccgtt cttctaagca aacncaggtg atgatggcna       480
aaatacaccc cctcttgaag naccnggagg a                                       511


<210> 73
<211> 499
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(499)
<223> n = A,T,C or G

<400> 73
cagtgccagc actggtgcca gtaccagtac caataacagt gccagtgcca gtgccagcac        60
```

```
cagtggtggc ttcagtgctg gtgccagcct gaccgccact ctcacatttg ggctcttcgc    120
tggccttggt ggagctggtg ccagcaccag tggcagctct ggtgcctgtg gtttctccta    180
caagtgagat tttagatatt gttaatcctg ccagtctttc tcttcaagcc agggtgcatc    240
ctcagaaacc tactcaacac agcactctag gcagccacta tcaatcaatt gaagttgaca    300
ctctgcatta aatctatttg ccatttctga aaaaaaaaaa aaaaaaaggg cggccgctcg    360
antctagagg gcccgtttaa acccgctgat cagcctcgac tgtgccttct anttgccagc    420
catctgttgt ttgcccctcc cccgntgcct tccttgaccc tggaaagtgc cactcccact    480
gtcctttcct aantaaaat                                                 499
```

        <210> 74
        <211> 537
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(537)
        <223> n = A,T,C or G

        <400> 74
```
tttcatagga gaacacactg aggagatact tgaagaattt ggattcagcc gcgaagagat     60
ttatcagctt aactcagata aaatcattga aagtaataag gtaaaagcta gtctctaact    120
tccaggccca cggctcaagt gaatttgaat actgcattta cagtgtagag taacacataa    180
cattgtatgc atggaaacat ggaggaacag tattacagtg tcctaccact ctaatcaaga    240
aaagaattac agactctgat tctacagtga tgattgaatt ctaaaaatgg taatcattag    300
ggcttttgat ttataanact ttgggtactt atactaaatt atggtagtta tactgccttc    360
cagtttgctt gatatatttg ttgatattaa gattcttgac ttatattttg aatgggttct    420
actgaaaaan gaatgatata ttcttgaaga catcgatata catttatttta cactcttgat    480
tctacaatgt agaaaatgaa ggaaatgccc caaattgtat ggtgataaaa gtcccgt       537
```

        <210> 75
        <211> 467
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(467)
        <223> n = A,T,C or G

        <400> 75
```
caaanacaat tgttcaaaag atgcaaatga tacactactg ctgcagctca caaacacctc     60
tgcatattac acgtacctcc tcctgctcct caagtagtgt ggtctatttt gccatcatca    120
cctgctgtct gcttagaaga acggctttct gctgcaangg agagaaatca taacagacgg    180
tggcacaagg aggccatctt ttcctcatcg gttattgtcc ctagaagcgt cttctgagga    240
tctagttggg ctttctttct gggtttgggc catttcantt ctcatgtgtg tactattcta    300
tcattattgt ataacggttt tcaaaccngt gggcacncag agaacctcac tctgtaataa    360
caatgaggaa tagccacggt gatctccagc accaaatctc tccatgttnt tccagagctc    420
ctccagccaa cccaaatagc cgctgctatn gtgtagaaca tccctgn               467
```

        <210> 76

```
<211> 400
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 76
aagctgacag cattcgggcc gagatgtctc gctccgtggc cttagctgtg ctcgcgctac    60
tctctctttc tggcctggag gctatccagc gtactccaaa gattcaggtt tactcacgtc   120
atccagcaga gaatggaaag tcaaatttcc tgaattgcta tgtgtctggg tttcatccat   180
ccgacattga agttgactta ctgaagaatg gagagagaat tgaaaaagtg gagcattcag   240
acttgtcttt cagcaaggac tggtctttct atctcttgta ctacactgaa ttcacccccca  300
ctgaaaaaga tgagtatgcc tgccgtgtga accatgtgac tttgtcacag cccaagatng   360
ttnagtggga tcganacatg taagcagcan catgggaggt                         400


<210> 77
<211> 248
<212> DNA
<213> Homo sapien

<400> 77
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct    60
ccagctgccc cggcggggga tgcgaggctc ggagcaccct tgcccggctg tgattgctgc   120
caggcactgt tcatctcagc ttttctgtcc ctttgctccc ggcaagcgct tctgctgaaa   180
gttcatatct ggagcctgat gtcttaacga ataaaggtcc catgctccac ccgaaaaaaa   240
aaaaaaaa                                                           248


<210> 78
<211> 201
<212> DNA
<213> Homo sapien

<400> 78
actagtccag tgtggtggaa ttccattgtg ttgggcccaa cacaatggct acctttaaca    60
tcacccagac cccgccctgc ccgtgcccca cgctgctgct aacgacagta tgatgcttac   120
tctgctactc ggaaactatt tttatgtaat taatgtatgc tttcttgttt ataaatgcct   180
gatttaaaaa aaaaaaaaaa a                                             201


<210> 79
<211> 552
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(552)
<223> n = A,T,C or G
```

<400> 79

```
tccttttgtt aggtttttga dacaacccta gacctaaact gtgtcacaga cttctgaatg        60
tttaggcagt gctagtaatt tcctcgtaat gattctgtta ttactttcct attctttatt       120
cctctttctt ctgaagatta atgaagttga aaattgaggt ggataaatac aaaaaggtag       180
tgtgatagta taagtatcta agtgcagatg aaagtgtgtt atatatatcc attcaaaatt       240
atgcaagtta gtaattactc agggttaact aaattacttt aatatgctgt tgaacctact       300
ctgttccttg gctagaaaaa attataaaca ggactttgtt agtttgggaa gccaaattga       360
taatattcta tgttctaaaa gttgggctat acataaanta tnaagaaata tggaatttta       420
ttcccaggaa tatggggttc atttatgaat antacccggg anagaagttt tgantnaaac       480
cngttttggt taatacgtta atatgtcctn aatnaacaag gcntgactta tttccaaaaa       540
aaaaaaaaaa aa                                                           552
```

<210> 80
<211> 476
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(476)
<223> n = A,T,C or G

<400> 80

```
acagggattt gagatgctaa ggccccagag atcgtttgat ccaaccctct tattttcaga        60
ggggaaaatg gggcctagaa gttacagagc atctagctgg tgcgctggca cccctggcct       120
cacacagact cccgagtagc tgggactaca ggcacacagt cactgaagca ggccctgttt       180
gcaattcacg ttgccacctc caacttaaac attcttcata tgtgatgtcc ttagtcacta       240
aggttaaact ttcccaccca gaaaaggcaa cttagataaa atcttagagt actttcatac       300
tcttctaagt cctcttccag cctcactttg agtcctcctt gggggttgat aggaantntc       360
tcttggcttt ctcaataaaa tctctatcca tctcatgttt aatttggtac gcntaaaaat       420
gctgaaaaaa ttaaaatgtt ctggtttcnc tttaaaaaaa aaaaaaaaaa aaaaaa          476
```

<210> 81
<211> 232
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(232)
<223> n = A,T,C or G

<400> 81

```
ttttttttttg tatgccntcn ctgtggngtt attgttgctg ccaccctgga ggagcccagt        60
ttcttctgta tctttctttt ctgggggatc ttcctggctc tgcccctcca ttcccagcct       120
ctcatcccca tcttgcactt ttgctagggt tggaggcgct ttcctggtag cccctcagag       180
actcagtcag cgggaataag tcctaggggt ggggggtgtg gcaagccggc ct              232
```

<210> 82
<211> 383
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 82

```
aggcgggagc agaagctaaa gccaaagccc aagaagagtg gcagtgccag cactggtgcc      60
agtaccagta ccaataacat gccagtgcca gtgccagcac cagtggtggc ttcagtgctg     120
gtgccagcct gaccgccact ctcacatttg ggctcttcgc tggccttggt ggagctggtg     180
ccagcaccag tggcagctct ggtgcctgtg gtttctccta caagtgagat tttagatatt     240
gttaatcctg ccagtctttc tcttcaagcc agggtgcatc ctcagaaacc tactcaacac     300
agcactctng gcagccacta tcaatcaatt gaagttgaca ctctgcatta aatctatttg     360
ccatttcaaa aaaaaaaaaa aaa                                            383
```

<210> 83
<211> 494
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(494)
<223> n = A,T,C or G

<400> 83

```
accgaattgg gaccgctggc ttataagcga tcatgtcctc cagtattacc tcaacgagca      60
gggagatcga gtctatacgc tgaagaaatt tgacccgatg ggacaacaga cctgctcagc     120
ccatcctgct cggttctccc cagatgacaa atactctcga caccgaatca ccatcaagaa     180
acgcttcaag gtgctcatga cccagcaacc gcgccctgtc ctctgagggt ccttaaactg     240
atgtcttttc tgccacctgt tacccctcgg agactccgta accaaactct tcggactgtg     300
agccctgatg cctttttgcc agccatactc tttggcntcc agtctctcgt ggcgattgat     360
tatgcttgtg tgaggcaatc atggtggcat cacccatnaa gggaacacat ttganttttt     420
tttcncatat tttaaattac naccagaata nttcagaata aatgaattga aaaactctta     480
aaaaaaaaaa aaaa                                                      494
```

<210> 84
<211> 380
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 84

```
gctggtagcc tatggcgtgg ccacggangg gctcctgagg cacgggacag tgacttccca      60
agtatcctgc gccgcgtctt ctaccgtccc tacctgcaga tcttcgggca gattccccag     120
gaggacatgg acgtggccct catggagcac agcaactgct cgtcggagcc cggcttctgg     180
```

```
gcacaccctc ctggggccca ggcgggcacc tgcgtctccc agtatgccaa ctggctggtg      240
gtgctgctcc tcgtcatctt cctgctcgtg gccaacatcc tgctggtcac ttgctcattg      300
ccatgttcag ttacacattc ggcaaagtac agggcaacag cnatctctac tgggaaggcc      360
agcgttnccg cctcatccgg                                                  380
```

        <210> 85
        <211> 481
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(481)
        <223> n = A,T,C or G

        <400> 85
```
gagttagctc ctccacaacc ttgatgaggt cgtctgcagt ggcctctcgc ttcataccgc      60
tnccatcgtc atactgtagg tttgccacca cctcctgcat cttggggcgg ctaatatcca      120
ggaaactctc aatcaagtca ccgtcnatna aacctgtggc tggttctgtc ttccgctcgg      180
tgtgaaagga tctccagaag gagtgctcga tcttccccac acttttgatg actttattga      240
gtcgattctg catgtccagc aggaggttgt accagctctc tgacagtgag gtcaccagcc      300
ctatcatgcc nttgaacgtg ccgaagaaca ccgagccttg tgtggggggt gnagtctcac      360
ccagattctg cattaccaga nagccgtggc aaaaganatt gacaactcgc ccaggnngaa      420
aaagaacacc tcctggaagt gctngccgct cctcgtccnt tggtggnngc gcntnccttt      480
t                                                                      481
```

        <210> 86
        <211> 472
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(472)
        <223> n = A,T,C or G

        <400> 86
```
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgctg agaattcatt      60
acttggaaaa gcaacttnaa gcctggacac tggtattaaa attcacaata tgcaacactt      120
taaacagtgt gtcaatctgc tcccttactt tgtcatcacc agtctgggaa taagggtatg      180
ccctattcac acctgttaaa agggcgctaa gcatttttga ttcaacatct ttttttttga      240
cacaagtccg aaaaaagcaa aagtaaacag ttnttaattt gttagccaat tcactttctt      300
catgggacag agccatttga tttaaaaagc aaattgcata atattgagct ttgggagctg      360
atatntgagc ggaagantag cctttctact tcaccagaca caactccttt catattggga      420
tgttnacnaa agttatgtct cttacagatg ggatgctttt gtggcaattc tg             472
```

        <210> 87
        <211> 413
        <212> DNA
        <213> Homo sapien

```
      <220>
      <221> misc_feature
      <222> (1)...(413)
      <223> n = A,T,C or G

      <400> 87
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaatttt  tgtgtgcgtg      60
tgtgtgtgcg cgcatattat atagacaggc acatctttt tactttttgta aaagcttatg     120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct     180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt     240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc cttgactagg     300
ggggacaaag aaaagcanaa ctgaacatna gaaacaattn cctggtgaga aattncataa     360
acagaaattg ggtngtatat tgaaananng catcattnaa acgttttttt ttt           413


      <210> 88
      <211> 448
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(448)
      <223> n = A,T,C or G

      <400> 88
cgcagcgggt cctctctatc tagctccagc ctctcgcctg ccccactccc cgcgtcccgc      60
gtcctagccn accatggccg ggcccctgcg cgccccgctg ctcctgctgg ccatcctggc     120
cgtggccctg gccgtgagcc ccgcggccgg ctccagtccc ggcaagccgc cgcgcctggt     180
gggaggccca tggaccccgc gtggaagaag aaggtgtgcg gcgtgcactg gactttgccg     240
tcggcnanta caacaaaccc gcaacnactt ttaccnagcn cgcgctgcag gttgtgccgc     300
cccaancaaa ttgttactng gggtaantaa ttcttggaag ttgaacctgg gccaaacnng     360
tttaccagaa ccnagccaat tngaacaatt nccctccat aacagccct tttaaaaagg      420
gaancantcc tgntctttttc caaattttt                                      448


      <210> 89
      <211> 463
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(463)
      <223> n = A,T,C or G

      <400> 89
gaattttgtg cactggccac tgtgatggaa ccattgggcc aggatgcttt gagtttatca      60
gtagtgattc tgccaaagtt ggtgttgtaa catgagtatg taaaatgtca aaaaattagc     120
agaggtctag gtctgcatat cagcagacag tttgtccgtg tattttgtag ccttgaagtt     180
ctcagtgaca agttnnttct gatgcgaagt tctnattcca gtgttttagt cctttgcatc     240
tttnatgttn agacttgcct ctntnaaatt gcttttgtnt tctgcaggta ctatctgtgg     300
tttaacaaaa tagaannact tctctgcttn gaanatttga atatcttaca tctnaaaatn     360
```

```
aattctctcc ccatannaaa acccangccc ttggganaat ttgaaaaang gntccttcnn    420
aattcnnana anttcagntn tcatacaaca naacngganc ccc                      463
```

<210> 90
<211> 400
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 90
```
agggattgaa ggtctnttnt actgtcggac tgttcancca ccaactctac aagttgctgt     60
cttccactca ctgtctgtaa gcntnttaac ccagactgta tcttcataaa tagaacaaat    120
tcttcaccag tcacatcttc taggaccttt ttggattcag ttagtataag ctcttccact    180
tcctttgtta agacttcatc tggtaaagtc ttaagttttg tagaaaggaa tttaattgct    240
cgttctctaa caatgtcctc tccttgaagt atttggctga acaacccacc tnaagtccct    300
ttgtgcatcc attttaaata tacttaatag ggcattggtn cactaggtta aattctgcaa    360
gagtcatctg tctgcaaaag ttgcgttagt atatctgcca                         400
```

<210> 91
<211> 480
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 91
```
gagctcggat ccaataatct ttgtctgagg gcagcacaca tatncagtgc catggnaact     60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac    120
atgcctcttt gactaccgtg tgccagtgct ggtgattctc acacacctcc nnccgctctt    180
tgtggaaaaa ctggcacttg nctggaacta gcaagacatc acttacaaat tcacccacga    240
gacacttgaa aggtgtaaca aagcgactct tgcattgctt tttgtccctc cggcaccagt    300
tgtcaatact aacccgctgg tttgcctcca tcacatttgt gatctgtagc tctggataca    360
tctcctgaca gtactgaaga acttcttctt ttgtttcaaa agcaactctt ggtgcctgtt    420
ngatcaggtt cccatttccc agtccgaatg ttcacatggc atatnttact tcccacaaaa    480
```

<210> 92
<211> 477
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(477)
<223> n = A,T,C or G

```
<400> 92
atacagccca natcccacca cgaagatgcg cttgttgact gagaacctga tgcggtcact       60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcctt      120
cccacgcagg cagcagcggg gccggtcaat gaactccact cgtggcttgg ggttgacggt      180
taantgcagg aagaggctga ccacctcgcg gtccaccagg atgcccgact gtgcgggacc      240
tgcagcgaaa ctcctcgatg gtcatgagcg ggaagcgaat gangcccagg gccttgccca      300
gaaccttccg cctgttctct ggcgtcacct gcagctgctg ccgctnacac tcggcctcgg      360
accagcggac aaacggcgtt gaacagccgc acctcacgga tgcccantgt gtcgcgctcc      420
aggaacggcn ccagcgtgtc caggtcaatg tcggtgaanc ctccgcgggt aatggcg        477
```

```
<210> 93
<211> 377
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G
```

```
<400> 93
gaacggctgg accttgcctc gcattgtgct gctggcagga ataccttggc aagcagctcc       60
agtccgagca gccccagacc gctgccgccc gaagctaagc ctgcctctgg ccttcccctc      120
cgcctcaatg cagaaccant agtgggagca ctgtgtttag agttaagagt gaacactgtn      180
tgattttact tgggaatttc ctctgttata tagcttttcc caatgctaat ttccaaacaa      240
caacaacaaa ataacatgtt tgcctgttna gttgtataaa agtangtgat tctgtatnta      300
aagaaaatat tactgttaca tatactgctt gcaanttctg tatttattgg tnctctggaa      360
ataaatatat tattaaa                                                     377
```

```
<210> 94
<211> 495
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(495)
<223> n = A,T,C or G
```

```
<400> 94
ccctttgagg ggttagggtc cagttcccag tggaagaaac aggccaggag aantgcgtgc       60
cgagctgang cagatttccc acagtgaccc cagagccctg ggctatagtc tctgacccct      120
ccaaggaaag accaccttct ggggacatgg gctggagggc aggacctaga ggcaccaagg      180
gaaggcccca ttccggggct gttccccgag gaggaaggga aggggctctg tgtgcccccc      240
acgaggaana ggccctgant cctgggatca nacacccctt cacgtgtatc cccacacaaa      300
tgcaagctca ccaaggtccc ctctcagtcc cttccctaca ccctgaacgg ncactggccc      360
acacccaccc agancancca cccgccatgg ggaatgtnct caaggaatcg cnggggcaacg      420
tggactctng tcccnnaagg gggcagaatc tccaatagan ggannngaacc cttgctnana     480
aaaaaaaana aaaaa                                                       495
```

```
<210> 95
<211> 472
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(472)
<223> n = A,T,C or G

<400> 95
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc      60
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt     120
tagctgtttt gagttgattc gcaccactgc accacaactc aatatgaaaa ctatttnact     180
tatttattat cttgtgaaaa gtatacaatg aaaattttgt tcatactgta tttatcaagt     240
atgatgaaaa gcaatagata tatattcttt tattatgttn aattatgatt gccattatta     300
atcggcaaaa tgtggagtgt atgttctttt cacagtaata tatgcctttt gtaacttcac     360
ttggttattt tattgtaaat gaattacaaa attcttaatt taagaaatg gtangttata      420
tttanttcan taatttcttt ccttgtttac gttaattttg aaaagaatgc at             472
```

```
<210> 96
<211> 476
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(476)
<223> n = A,T,C or G

<400> 96
ctgaagcatt tcttcaaact tntctacttt tgtcattgat acctgtagta agttgacaat      60
gtggtgaaat ttcaaaatta tatgtaactt ctactagttt tactttctcc cccaagtctt     120
ttttaactca tgattttttac acacacaatc cagaacttat tatatagcct ctaagtcttt    180
attcttcaca gtagatgatg aaagagtcct ccagtgtctt gngcanaatg ttctagntat     240
agctggatac atacngtggg agttctataa actcatacct cagtgggact naaccaaaat     300
tgtgttagtc tcaattccta ccacactgag ggagcctccc aaatcactat attcttatct     360
gcaggtactc ctccagaaaa acngacaggg caggcttgca tgaaaaagtn acatctgcgt     420
tacaaagtct atcttcctca nangtctgtn aaggaacaat ttaatcttct agcttt         476
```

```
<210> 97
<211> 479
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(479)
<223> n = A,T,C or G

<400> 97
```

```
actctttcta atgctgatat gatcttgagt ataagaatgc atatgtcact agaatggata      60
aaataatgct gcaaacttaa tgttcttatg caaaatggaa cgctaatgaa acacagctta     120
caatcgcaaa tcaaaactca caagtgctca tctgttgtag atttagtgta ataagactta     180
gattgtgctc cttcggatat gattgtttct canatcttgg gcaatnttcc ttagtcaaat     240
caggctacta gaattctgtt attggatatn tgagagcatg aaatttttaa naatacactt     300
gtgattatna aattaatcac aaatttcact tatacctgct atcagcagct agaaaaacat     360
ntnntttta natcaaagta ttttgtgttt ggaantgtnn aaatgaaatc tgaatgtggg     420
ttcnatctta ttttttcccn gacnactant tncttttta gggnctattc tganccatc     479
```

```
        <210> 98
        <211> 461
        <212> DNA
        <213> Homo sapien

        <400> 98
agtgacttgt cctccaacaa aaccccttga tcaagtttgt ggcactgaca atcagaccta      60
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaaggggca     120
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga     180
agtgattcag tttcctctac ggatgagaga ctggctcaag aatatcctca tgcagcttta     240
tgaagccact ctgaacacgc tggttatcta gatgagaaca gagaaataaa gtcagaaaat     300
ttacctggag aaaagaggct ttggctgggg accatcccat tgaaccttct cttaaggact     360
ttaagaaaaa ctaccacatg ttgtgtatcc tggtgccggc cgtttatgaa ctgaccaccc     420
tttggaataa tcttgacgct cctgaacttg ctcctctgcg a                        461
```

```
        <210> 99
        <211> 171
        <212> DNA
        <213> Homo sapien

        <400> 99
gtggccgcgc gcaggtgttt cctcgtaccg cagggccccc tcccttcccc aggcgtccct      60
cggcgcctct gcgggcccga ggaggagcgg ctggcgggtg gggggagtgt gacccaccct     120
cggtgagaaa agccttctct agcgatctga gaggcgtgcc ttgggggtac c              171
```

```
        <210> 100
        <211> 269
        <212> DNA
        <213> Homo sapien

        <400> 100
cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc      60
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc     120
aaggctgagc tgacgccgca gaggtcgtgt cacgtcccac gaccttgacg ccgtcgggga     180
cagccggaac agagcccggt gaagcgggag gcctcgggga gcccctcggg aagggcggcc     240
cgagagatac gcaggtgcag gtggccgcc                                      269
```

```
        <210> 101
        <211> 405
        <212> DNA
        <213> Homo sapien
```

```
      <400> 101
ttttttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca        60
gctagcaagg taacagggta gggcatggtt acatgttcag gtcaacttcc tttgtcgtgg        120
ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaacgaagca aataacatgg        180
agtgggtgca ccctccctgt agaacctggt tacaaagctt ggggcagttc acctggtctg        240
tgaccgtcat tttcttgaca tcaatgttat tagaagtcag gatatctttt agagagtcca        300
ctgttctgga gggagattag ggtttcttgc caaatccaac aaaatccact gaaaaagttg        360
gatgatcagt acgaataccg aggcatattc tcatatcggt ggcca                       405


      <210> 102
      <211> 470
      <212> DNA
      <213> Homo sapien

      <400> 102
ttttttttttt ttttttttttt ttttttttttt ttttttttttt ttttttttttt ttttttttttt      60
ggcacttaat ccatttttat ttcaaaatgt ctacaaattt aatcccatta tacggtattt        120
tcaaaatcta aattattcaa attagccaaa tccttaccaa ataataccca aaaatcaaaa        180
atatacttct ttcagcaaac ttgttacata aattaaaaaa atatatacgg ctggtgtttt        240
caaagtacaa ttatcttaac actgcaaaca ttttaaggaa ctaaaataaa aaaaaacact        300
ccgcaaaggt taaagggaac aacaaattct tttacaacac cattataaaa atcatatctc        360
aaatcttagg ggaatatata cttcacacgg gatcttaact tttactcact ttgtttattt        420
ttttaaacca ttgtttgggc ccaacacaat ggaatccccc ctggactagt                  470


      <210> 103
      <211> 581
      <212> DNA
      <213> Homo sapien

      <400> 103
ttttttttttt tttttttttga ccccccctctt ataaaaaaca agttaccatt ttattttact      60
tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaatcaaac        120
taaatggaaa ctgccttaga tacataattc ttaggaatta gcttaaaatc tgcctaaagt        180
gaaaatcttc tctagctctt ttgactgtaa attttttgact cttgtaaaac atccaaattc        240
attttttcttg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcaattt       300
gcttctctag cctcatttcc tagctcttat ctactattag taagtggctt ttttcctaaa        360
agggaaaaca ggaagagaaa tggcacacaa aacaaacatt ttatattcat atttctacct        420
acgttaataa aatagcattt tgtgaagcca gctcaaaaga aggcttagat ccttttatgt        480
ccattttagt cactaaacga tatcaaagtg ccagaatgca aaaggtttgt gaacatttat        540
tcaaaagcta atataagata tttcacatac tcatctttct g                           581


      <210> 104
      <211> 578
      <212> DNA
      <213> Homo sapien

      <400> 104
ttttttttttt ttttttttttt tttttctctt cttttttttt gaaatgagga tcgagttttt      60
cactctctag atagggcatg aagaaaactc atctttccag ctttaaaata acaatcaaat       120
ctcttatgct atatcatatt ttaagttaaa ctaatgagtc actggcttat cttctcctga        180
aggaaatctg ttcattcttc tcattcatat agttatatca agtactacct tgcatattga       240
```

```
gaggttttc ttctctattt acacatatat ttccatgtga atttgtatca aacctttatt      300
ttcatgcaaa ctagaaaata atgtttcttt tgcataagag aagagaacaa tatagcatta      360
caaaactgct caaattgttt gttaagttat ccattataat tagttggcag gagctaatac      420
aaatcacatt tacgacagca ataataaaac tgaagtacca gttaaatatc caaaataatt      480
aaaggaacat ttttagcctg ggtataatta gctaattcac tttacaagca tttattagaa      540
tgaattcaca tgttattatt cctagcccaa cacaatgg                             578
```

        <210> 105
        <211> 538
        <212> DNA
        <213> Homo sapien

        <400> 105
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tttttttttt tttttcagta ataatcagaa caatatttat ttttatattt aaaattcata       60
gaaaagtgcc ttacatttaa taaaagtttg tttctcaaag tgatcagagg aattagatat      120
gtcttgaaca ccaatattaa tttgaggaaa atacaccaaa atacattaag taaattattt      180
aagatcatag agcttgtaag tgaaaagata aaatttgacc tcagaaactc tgagcattaa      240
aaatccacta ttagcaaata aattactatg gacttcttgc tttaattttg tgatgaatat      300
ggggtgtcac tggtaaacca acacattctg aaggatacat tacttagtga tagattctta      360
tgtactttgc taatacgtgg atatgagttg acaagtttct ctttcttcaa tcttttaagg      420
ggcgagaaat gaggaagaaa agaaaaggat tacgcatact gttctttcta tggaaggatt      480
agatatgttt cctttgccaa tattaaaaaa ataataatgt ttactactag tgaaaccc       538
```

        <210> 106
        <211> 473
        <212> DNA
        <213> Homo sapien

        <400> 106
```
tttttttttt tttttagtc aagtttctat ttttattata attaaagtct tggtcatttc       60
atttattagc tctgcaactt acatatttaa attaaagaaa cgttttagac aactgtacaa      120
tttataaatg taaggtgcca ttattgagta atatattcct ccaagagtgg atgtgtccct      180
tctcccacca actaatgaac agcaacatta gtttaatttt attagtagat atacactgct      240
gcaaacgcta attctcttct ccatccccat gtgatattgt gtatatgtgt gagttggtag      300
aatgcatcac aatctacaat caacagcaag atgaagctag gctgggcttt cggtgaaaat      360
agactgtgtc tgtctgaatc aaatgatctg acctatcctc ggtggcaaga actcttcgaa      420
ccgcttcctc aaaggcgctg ccacattgt ggctctttgc acttgtttca aaa            473
```

        <210> 107
        <211> 1621
        <212> DNA
        <213> Homo sapien

        <400> 107
```
cgccatggca ctgcagggca tctcggtcat ggagctgtcc ggcctggccc cgggcccgtt       60
ctgtgctatg gtcctggctg acttcggggc gcgtgtggta cgcgtggacc ggcccggctc      120
ccgctacgac gtgagccgct tgggccgggg caagcgctcg ctagtgctgg acctgaagca      180
gccgcgggga gccgccgtgc tgcggcgtct gtgcaagcgg tcggatgtgc tgctggagcc      240
cttccgccgc ggtgtcatgg agaaactcca gctgggccca gagattctgc agcgggaaaa      300
tccaaggctt atttatgcca ggctgagtgg atttggccag tcaggaagct tctgccggtt      360
agctggccac gatatcaact atttggcttt gtcaggtgtt ctctcaaaaa ttggcagaag      420
```

```
tggtgagaat ccgtatgccc cgctgaatct cctggctgac tttgctggtg gtggccttat    480
gtgtgcactg ggcattataa tggctctttt tgaccgcaca cgcactgaca agggtcaggt    540
cattgatgca aatatggtgg aaggaacagc atatttaagt tcttttctgt ggaaaactca    600
gaaatcgagt ctgtgggaag cacctcgagg acagaacatg ttggatggtg gagcaccttt    660
ctatacgact tacaggacag cagatgggga attcatggct gttggagcaa tagaacccca    720
gttctacgag ctgctgatca aaggacttgg actaaagtct gatgaacttc ccaatcagat    780
gagcatggat gattggccag aaatgaagaa gaagtttgca gatgtatttg caaagaagac    840
gaaggcagag tggtgtcaaa tctttgacgg cacagatgcc tgtgtgactc cggttctgac    900
ttttgaggag gttgttcatc atgatcacaa caaggaacgg ggctcgttta tcaccagtga    960
ggagcaggac gtgagccccc gccctgcacc tctgctgtta aacaccccag ccatcccttc   1020
tttcaaaagg gatcctttca taggagaaca cactgaggag atacttgaag aatttggatt   1080
cagccgcgaa gagatttatc agcttaactc agataaaatc attgaaagta ataaggtaaa   1140
agctagtctc taacttccag gcccacggct caagtgaatt tgaatactgc atttacagtg   1200
tagagtaaca cataacattg tatgcatgga aacatggagg aacagtatta cagtgtccta   1260
ccactctaat caagaaaaga attacagact ctgattctac agtgatgatt gaattctaaa   1320
aatggttatc attagggctt ttgatttata aaactttggg tacttatact aaattatggt   1380
agttattctg ccttccagtt tgcttgatat atttgttgat attaagattc ttgacttata   1440
ttttgaatgg gttctagtga aaaaggaatg atatattctt gaagacatcg atatacattt   1500
atttacactc ttgattctac aatgtagaaa atgaggaaat gccacaaatt gtatggtgat   1560
aaaagtcacg tgaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1620
a                                                                   1621
```

```
        <210> 108
        <211> 382
        <212> PRT
        <213> Homo sapien

        <400> 108
Met Ala Leu Gln Gly Ile Ser Val Met Glu Leu Ser Gly Leu Ala Pro
1               5                   10                  15
Gly Pro Phe Cys Ala Met Val Leu Ala Asp Phe Gly Ala Arg Val Val
            20                  25                  30
Arg Val Asp Arg Pro Gly Ser Arg Tyr Asp Val Ser Arg Leu Gly Arg
        35                  40                  45
Gly Lys Arg Ser Leu Val Leu Asp Leu Lys Gln Pro Arg Gly Ala Ala
        50                  55                  60
Val Leu Arg Arg Leu Cys Lys Arg Ser Asp Val Leu Leu Glu Pro Phe
65                  70                  75                  80
Arg Arg Gly Val Met Glu Lys Leu Gln Leu Gly Pro Glu Ile Leu Gln
            85                  90                  95
Arg Glu Asn Pro Arg Leu Ile Tyr Ala Arg Leu Ser Gly Phe Gly Gln
            100                 105                 110
Ser Gly Ser Phe Cys Arg Leu Ala Gly His Asp Ile Asn Tyr Leu Ala
        115                 120                 125
Leu Ser Gly Val Leu Ser Lys Ile Gly Arg Ser Gly Glu Asn Pro Tyr
        130                 135                 140
Ala Pro Leu Asn Leu Leu Ala Asp Phe Ala Gly Gly Gly Leu Met Cys
145                 150                 155                 160
Ala Leu Gly Ile Ile Met Ala Leu Phe Asp Arg Thr Arg Thr Asp Lys
            165                 170                 175
Gly Gln Val Ile Asp Ala Asn Met Val Glu Gly Thr Ala Tyr Leu Ser
```

```
                180                    185                    190
Ser Phe Leu Trp Lys Thr Gln Lys Ser Ser Leu Trp Glu Ala Pro Arg
            195                    200                    205
Gly Gln Asn Met Leu Asp Gly Gly Ala Pro Phe Tyr Thr Thr Tyr Arg
        210                    215                    220
Thr Ala Asp Gly Glu Phe Met Ala Val Gly Ala Ile Glu Pro Gln Phe
225                    230                    235                    240
Tyr Glu Leu Leu Ile Lys Gly Leu Gly Leu Lys Ser Asp Glu Leu Pro
                245                    250                    255
Asn Gln Met Ser Met Asp Asp Trp Pro Glu Met Lys Lys Lys Phe Ala
            260                    265                    270
Asp Val Phe Ala Lys Lys Thr Lys Ala Glu Trp Cys Gln Ile Phe Asp
        275                    280                    285
Gly Thr Asp Ala Cys Val Thr Pro Val Leu Thr Phe Glu Glu Val Val
    290                    295                    300
His His Asp His Asn Lys Glu Arg Gly Ser Phe Ile Thr Ser Glu Glu
305                    310                    315                    320
Gln Asp Val Ser Pro Arg Pro Ala Pro Leu Leu Leu Asn Thr Pro Ala
                325                    330                    335
Ile Pro Ser Phe Lys Arg Asp Pro Phe Ile Gly Glu His Thr Glu Glu
            340                    345                    350
Ile Leu Glu Glu Phe Gly Phe Ser Arg Glu Glu Ile Tyr Gln Leu Asn
        355                    360                    365
Ser Asp Lys Ile Ile Glu Ser Asn Lys Val Lys Ala Ser Leu
    370                    375                    380
```

```
<210> 109
<211> 1524
<212> DNA
<213> Homo sapien

<400> 109
ggcacgaggc tgcgccaggg cctgagcgga ggcgggggca gcctcgccag cgggggcccc    60
gggcctggcc atgcctcact gagccagcgc ctgcgcctct acctcgccga cagctggaac   120
cagtgcgacc tagtggctct cacctgcttc ctcctggggcg tgggctgccg gctgaccccg   180
ggtttgtacc acctgggccg cactgtcctc tgcatcgact tcatggtttt cacggtgcgg   240
ctgcttcaca tcttcacggt caacaaacag ctggggccca agatcgtcat cgtgagcaag   300
atgatgaagg acgtgttctt cttcctcttc ttcctcggcg tgtggctggt agcctatggc   360
gtggccacgg aggggctcct gaggccacgg gacagtgact tcccaagtat cctgcgccgc   420
gtcttctacc gtccctacct gcagatcttc gggcagattc cccaggagga catggacgtg   480
gccctcatgg agcacagcaa ctgctcgtcg gagcccggct ctgggcaca ccctcctggg   540
gcccaggcgg gcacctgcgt ctcccagtat gccaactggc tggtggtgct gctcctcgtc   600
atcttcctgc tcgtggccaa catcctgctg gtcaacttgc tcattgccat gttcagttac   660
acattcggca agtacagggg caacagcgat ctctactgga aggcgcagcg ttaccgcctc   720
atccgggaat tccactctcg gcccgcgctg gccccgccct ttatcgtcat ctcccacttg   780
cgcctcctgc tcaggcaatt gtgcaggcga ccccggagcc cccagccgtc ctccccggcc   840
ctcgagcatt tccgggttta cctttctaag gaagccgagc ggaagctgct aacgtgggaa   900
tcggtgcata aggagaactt tctgctggca cgcgctaggg acaagcggga gagcgactcc   960
gagcgtctga gcgcacgtc ccagaaggtg gacttggcac tgaaacagct gggacacatc  1020
cgcgagtacg aacagcgcct gaaagtgctg gagcgggagg tccagcagtg tagccgcgtc  1080
ctggggtggg tggccgaggc cctgagccgc tctgccttgc tgcccccagg tgggccgcca  1140
```

```
cccctgacc tgcctgggtc caaagactga gccctgctgg cggacttcaa ggagaagccc    1200
ccacagggga ttttgctcct agagtaaggc tcatctgggc ctcggccccc gcacctggtg    1260
gccttgtcct tgaggtgagc cccatgtcca tctgggccac tgtcaggacc acctttggga    1320
gtgtcatcct tacaaaccac agcatgcccg gctcctccca gaaccagtcc cagcctggga    1380
ggatcaaggc ctggatcccg ggccgttatc catctggagg ctgcagggtc cttggggtaa    1440
cagggaccac agacccctca ccactcacag attcctcaca ctggggaaat aaagccattt    1500
cagaggaaaa aaaaaaaaaa aaaa                                            1524


        <210> 110
        <211> 3410
        <212> DNA
        <213> Homo sapien


        <400> 110
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gtgatgagac gtgtccccac tgaggtgccc cacagcagca ggtgttgagc atgggctgag     120
aagctggacc ggcaccaaag ggctggcaga aatgggcgcc tggctgattc ctaggcagtt     180
ggcggcagca aggaggagag gccgcagctt ctggagcaga gccgagacga agcagttctg     240
gagtgcctga cggcccct gagccctacc cgcctggccc actatggtcc agaggctgtg     300
ggtgagccgc ctgctgcggc accggaaagc ccagctcttg ctggtcaacc tgctaacctt     360
tggcctggag gtgtgtttgg ccgcaggcat cacctatgtg ccgcctctgc tgctggaagt     420
gggggtagag gagaagttca tgaccatggt gctgggcatt ggtccagtgc tgggcctggt     480
ctgtgtcccg ctcctaggct cagccagtga ccactggcgt ggacgctatg gccgccgccg     540
gcccttcatc tgggcactgt ccttgggcat cctgctgagc ctctttctca tcccaagggc     600
cggctggcta gcagggctgc tgtgcccgga tcccaggccc ctggagctgg cactgctcat     660
cctgggcgtg gggctgctgg acttctgtgg ccaggtgtgc ttcactccac tggaggccct     720
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cgagccagca gaagggctgt cggccccctc cttgtcgccc cactgctgtc catgccgggc    1020
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catgccccgc accctgcgcc ggctcttcgt ggctgagctg tgcagctgga tggcactcat    1140
gaccttcacg ctgttttaca cggatttcgt gggcgagggg ctgtaccagg gcgtgcccag    1200
agctgagccg ggcaccgagg cccggagaca ctatgatgaa ggcgttcgga tgggcagcct    1260
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gcagcgattc ggcactcgag cagtctattt ggccagtgtg cagctttcc ctgtggctgc    1380
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cactgggtcc cagctcccg ctcctgttag ccccatgggg ctgccgggct ggccgccagt    2040
ttctgttgct gccaaagtaa tgtggctctc tgctgccacc ctgtgctgct gaggtgcgta    2100
gctgcacagc tggggctgg ggcgtccctc tcctctctcc ccagtctcta gggctgcctg    2160
actggaggcc ttccaagggg gtttcagtct ggacttatac agggaggcca gaagggctcc    2220
```

```
atgcactgga  atgcggggac  tctgcaggtg  gattacccag  gctcagggtt  aacagctagc    2280
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aaattaaagg  ctttcttata  tgtttaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa    3360
aaaaaaaara  aaaaaaaaaa  aaaaaaaaaa  aaaaaaataa  aaaaaaaaaa                3410
```

```
    <210> 111
    <211> 1289
    <212> DNA
    <213> Homo sapien

    <400> 111
agccaggcgt  ccctctgcct  gcccactcag  tggcaacacc  cgggagctgt  tttgtccttt     60
gtggagcctc  agcagttccc  tctttcagaa  ctcactgcca  agagccctga  acaggagcca    120
ccatgcagtg  cttcagcttc  attaagacca  tgatgatcct  cttcaatttg  ctcatctttc    180
tgtgtggtgc  agccctgttg  gcagtgggca  tctgggtgtc  aatcgatggg  gcatcctttc    240
tgaagatctt  cgggccactg  tcgtccagtg  ccatgcagtt  tgtcaacgtg  ggctacttcc    300
tcatcgcagc  cggcgttgtg  gtctttgctc  ttggtttcct  gggctgctat  ggtgctaaga    360
ctgagagcaa  gtgtgccctc  gtgacgttct  tcttcatcct  cctcctcatc  ttcattgctg    420
aggttgcagc  tgctgtggtc  gccttggtgt  acaccacaat  ggctgagcac  ttcctgacgt    480
tgctggtagt  gcctgccatc  aagaaagatt  atggttccca  ggaagacttc  actcaagtgt    540
ggaacaccac  catgaaaggg  ctcaagtgct  gtggcttcac  caactatacg  gattttgagg    600
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ccaacacagc  caatgaaacc  tgcaccaagc  aaaaggctca  cgaccaaaaa  gtagagggtt    720
gcttcaatca  gcttttgtat  gacatccgaa  ctaatgcagt  caccgtgggt  ggtgtggcag    780
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tacaataagt  ccacttctgc  ctctgccact  actgctgcca  catgggaact  gtgaagaggc    900
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gaatggacct  gccctttctg  ctccagactt  ggggctagat  agggaccact  ccttttagcg   1020
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gtagccagtt  ctgttgccca  ttcccccagt  ctattaaacc  cttgatatgc  ccctaggcc    1140
tagtggtgat  cccagtgctc  tactggggga  tgagagaaag  gcattttata  gcctgggcat   1200
aagtgaaatc  agcagagcct  ctgggtggat  gtgtagaagg  cacttcaaaa  tgcataaacc   1260
tgttacaatg  ttaaaaaaaa  aaaaaaaaa                                        1289
```

```
    <210> 112
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```
        <211> 315
        <212> PRT
        <213> Homo sapien

        <400> 112
Met Val Phe Thr Val Arg Leu Leu His Ile Phe Thr Val Asn Lys Gln
 1               5                  10                  15
Leu Gly Pro Lys Ile Val Ile Val Ser Lys Met Met Lys Asp Val Phe
            20                  25                  30
Phe Phe Leu Phe Phe Leu Gly Val Trp Leu Val Ala Tyr Gly Val Ala
        35                  40                  45
Thr Glu Gly Leu Leu Arg Pro Arg Asp Ser Asp Phe Pro Ser Ile Leu
    50                  55                  60
Arg Arg Val Phe Tyr Arg Pro Tyr Leu Gln Ile Phe Gly Gln Ile Pro
65                  70                  75                  80
Gln Glu Asp Met Asp Val Ala Leu Met Glu His Ser Asn Cys Ser Ser
                85                  90                  95
Glu Pro Gly Phe Trp Ala His Pro Pro Gly Ala Gln Ala Gly Thr Cys
            100                 105                 110
Val Ser Gln Tyr Ala Asn Trp Leu Val Val Leu Leu Leu Val Ile Phe
            115                 120                 125
Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile Ala Met Phe
        130                 135                 140
Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu Tyr Trp Lys
145                 150                 155                 160
Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg Pro Ala Leu
            165                 170                 175
Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu Leu Arg Gln
            180                 185                 190
Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro Ala Leu Glu
        195                 200                 205
His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys Leu Leu Thr
    210                 215                 220
Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg Ala Arg Asp
225                 230                 235                 240
Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser Gln Lys Val
            245                 250                 255
Asp Leu Ala Leu Lys Gln Leu Gly His Ile Arg Glu Tyr Glu Gln Arg
        260                 265                 270
Leu Lys Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg Val Leu Gly
        275                 280                 285
Trp Val Ala Glu Ala Leu Ser Arg Ser Ala Leu Leu Pro Pro Gly Gly
    290                 295                 300
Pro Pro Pro Pro Asp Leu Pro Gly Ser Lys Asp
305                 310                 315

        <210> 113
        <211> 553
        <212> PRT
        <213> Homo sapien
```

<400> 113

```
Met Val Gln Arg Leu Trp Val Ser Arg Leu Leu Arg His Arg Lys Ala
 1               5                  10                  15
Gln Leu Leu Leu Val Asn Leu Leu Thr Phe Gly Leu Glu Val Cys Leu
            20                  25                  30
Ala Ala Gly Ile Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val
        35                  40                  45
Glu Glu Lys Phe Met Thr Met Val Leu Gly Ile Gly Pro Val Leu Gly
    50                  55                  60
Leu Val Cys Val Pro Leu Leu Gly Ser Ala Ser Asp His Trp Arg Gly
65                  70                  75                  80
Arg Tyr Gly Arg Arg Arg Pro Phe Ile Trp Ala Leu Ser Leu Gly Ile
                85                  90                  95
Leu Leu Ser Leu Phe Leu Ile Pro Arg Ala Gly Trp Leu Ala Gly Leu
            100                 105                 110
Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu Ala Leu Leu Ile Leu Gly
        115                 120                 125
Val Gly Leu Leu Asp Phe Cys Gly Gln Val Cys Phe Thr Pro Leu Glu
    130                 135                 140
Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg Gln Ala
145                 150                 155                 160
Tyr Ser Val Tyr Ala Phe Met Ile Ser Leu Gly Gly Cys Leu Gly Tyr
                165                 170                 175
Leu Leu Pro Ala Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu
            180                 185                 190
Gly Thr Gln Glu Glu Cys Leu Phe Gly Leu Leu Thr Leu Ile Phe Leu
    195                 200                 205
Thr Cys Val Ala Ala Thr Leu Leu Val Ala Glu Glu Ala Ala Leu Gly
    210                 215                 220
Pro Thr Glu Pro Ala Glu Gly Leu Ser Ala Pro Ser Leu Ser Pro His
225                 230                 235                 240
Cys Cys Pro Cys Arg Ala Arg Leu Ala Phe Arg Asn Leu Gly Ala Leu
                245                 250                 255
Leu Pro Arg Leu His Gln Leu Cys Cys Arg Met Pro Arg Thr Leu Arg
            260                 265                 270
Arg Leu Phe Val Ala Glu Leu Cys Ser Trp Met Ala Leu Met Thr Phe
        275                 280                 285
Thr Leu Phe Tyr Thr Asp Phe Val Gly Glu Gly Leu Tyr Gln Gly Val
    290                 295                 300
Pro Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
305                 310                 315                 320
Val Arg Met Gly Ser Leu Gly Leu Phe Leu Gln Cys Ala Ile Ser Leu
                325                 330                 335
Val Phe Ser Leu Val Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg
            340                 345                 350
Ala Val Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala
        355                 360                 365
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
    370                 375                 380
Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr Leu Ala
385                 390                 395                 400
```

```
Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro Lys Tyr Arg Gly
            405             410             415
Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser Leu Met Thr Ser Phe Leu
            420             425             430
Pro Gly Pro Lys Pro Gly Ala Pro Phe Pro Asn Gly His Val Gly Ala
            435             440             445
Gly Gly Ser Gly Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser
    450             455             460
Ala Cys Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala
465             470             475             480
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
            485             490             495
Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met Gly Ser
            500             505             510
Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met Val Ser Ala Ala
            515             520             525
Gly Leu Gly Leu Val Ala Ile Tyr Phe Ala Thr Gln Val Val Phe Asp
    530             535             540
Lys Ser Asp Leu Ala Lys Tyr Ser Ala
545             550
```

```
        <210> 114
        <211> 241
        <212> PRT
        <213> Homo sapien

        <400> 114
Met Gln Cys Phe Ser Phe Ile Lys Thr Met Met Ile Leu Phe Asn Leu
1           5               10              15
Leu Ile Phe Leu Cys Gly Ala Ala Leu Leu Ala Val Gly Ile Trp Val
            20              25              30
Ser Ile Asp Gly Ala Ser Phe Leu Lys Ile Phe Gly Pro Leu Ser Ser
            35              40              45
Ser Ala Met Gln Phe Val Asn Val Gly Tyr Phe Leu Ile Ala Ala Gly
    50              55              60
Val Val Val Phe Ala Leu Gly Phe Leu Gly Cys Tyr Gly Ala Lys Thr
65              70              75              80
Glu Ser Lys Cys Ala Leu Val Thr Phe Phe Phe Ile Leu Leu Leu Ile
            85              90              95
Phe Ile Ala Glu Val Ala Ala Ala Val Val Ala Leu Val Tyr Thr Thr
            100             105             110
Met Ala Glu His Phe Leu Thr Leu Leu Val Val Pro Ala Ile Lys Lys
            115             120             125
Asp Tyr Gly Ser Gln Glu Asp Phe Thr Gln Val Trp Asn Thr Thr Met
    130             135             140
Lys Gly Leu Lys Cys Cys Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp
145             150             155             160
Ser Pro Tyr Phe Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn
            165             170             175
Asp Asn Val Thr Asn Thr Ala Asn Glu Thr Cys Thr Lys Gln Lys Ala
            180             185             190
```

```
His Asp Gln Lys Val Glu Gly Cys Phe Asn Gln Leu Leu Tyr Asp Ile
        195             200             205
Arg Thr Asn Ala Val Thr Val Gly Gly Val Ala Ala Gly Ile Gly Gly
        210             215             220
Leu Glu Leu Ala Ala Met Ile Val Ser Met Tyr Leu Tyr Cys Asn Leu
225             230             235             240
Gln
```

```
<210> 115
<211> 366
<212> DNA
<213> Homo sapien

<400> 115
gctctttctc tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca      60
catttcactg tgatgtatat tgtgttgcaa aaaaaaaaa gtgtctttgt ttaaaattac     120
ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccatctctga     180
actggtagaa aaacatctga agagctagtc tatcagcatc tgacaggtga attggatggt     240
tctcagaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt     300
tctctacatg cataacaaac cctgctccaa tctgtcacat aaaagtctgt gacttgaagt     360
ttagtc                                                               366
```

```
<210> 116
<211> 282
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(282)
<223> n = A,T,C or G

<400> 116
acaaagatga accatttcct atattatagc aaaattaaaa tctacccgta ttctaatatt      60
gagaaatgag atnaaacaca atnttataaa gtctacttag agaagatcaa gtgacctcaa     120
agactttact attttcatat tttaagacac atgatttatc ctattttagt aacctggttc     180
atacgttaaa caaaggataa tgtgaacagc agagaggatt tgttggcaga aaatctatgt     240
tcaatctnga actatctana tcacagacat ttctattcct tt                       282
```

```
<210> 117
<211> 305
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 117
```

```
acacatgtcg cttcactgcc ttcttagatg cttctggtca acatanagga acagggacca      60
tatttatcct ccctcctgaa acaattgcaa aataanacaa aatatatgaa acaattgcaa     120
aataaggcaa aatatatgaa acaacaggtc tcgagatatt ggaaatcagt caatgaagga     180
tactgatccc tgatcactgt cctaatgcag gatgtgggaa acagatgagg tcacctctgt     240
gactgcccca gcttactgcc tgtagagagt ttctangctg cagttcagac agggagaaat     300
tgggt                                                                 305
```

```
        <210> 118
        <211> 71
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(71)
        <223> n = A,T,C or G


        <400> 118
accaaggtgt ntgaatctct gacgtgggga tctctgattc ccgcacaatc tgagtggaaa      60
aantcctggg t                                                          71


        <210> 119
        <211> 212
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(212)
        <223> n = A,T,C or G


        <400> 119
actccggttg gtgtcagcag cacgtggcat tgaacatngc aatgtggagc ccaaaccaca      60
gaaaatgggg tgaaattggc caactttcta tnaacttatg ttggcaantt tgccaccaac     120
agtaagctgg cccttctaat aaaagaaaat tgaaaggttt ctcactaanc ggaattaant     180
aatggantca aganactccc aggcctcagc gt                                   212


        <210> 120
        <211> 90
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(90)
        <223> n = A,T,C or G


        <400> 120
actcgttgca natcaggggc cccccagagt caccgttgca ggagtccttc tggtcttgcc      60
ctccgccggc gcagaacatg ctggggtggt                                      90
```

```
<210> 121
<211> 218
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(218)
<223> n = A,T,C or G

<400> 121
tgtancgtga anacgacaga nagggttgtc aaaaatggag aanccttgaa gtcattttga      60
gaataagatt tgctaaaaga tttggggcta aaacatggtt attgggagac atttctgaag     120
atatncangt aaattangga atgaattcat ggttcttttg ggaattcctt tacgatngcc     180
agcatanact tcatgtgggg atancagcta cccttgta                             218


<210> 122
<211> 171
<212> DNA
<213> Homo sapien

<400> 122
taggggtgta tgcaactgta aggacaaaaa ttgagactca actggcttaa ccaataaagg      60
catttgttag ctcatggaac aggaagtcgg atggtggggc atcttcagtg ctgcatgagt     120
caccaccccg gcggggtcat ctgtgccaca ggtccctgtt gacagtgcgg t             171


<210> 123
<211> 76
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(76)
<223> n = A,T,C or G

<400> 123
tgtagcgtga agacnacaga atggtgtgtg ctgtgctatc caggaacaca tttattatca      60
ttatcaanta ttgtgt                                                      76


<210> 124
<211> 131
<212> DNA
<213> Homo sapien

<400> 124
acctttcccc aaggccaatg tcctgtgtgc taactggccg gctgcaggac agctgcaatt      60
caatgtgctg ggtcatatgg aggggaggag actctaaaat agccaatttt attctcttgg     120
ttaagatttg t                                                          131


<210> 125
```

```
<211> 432
<212> DNA
<213> Homo sapien

<400> 125
actttatcta ctggctatga aatagatggt ggaaaattgc gttaccaact ataccactgg      60
cttgaaaaag aggtgatagc tcttcagagg acttgtgact tttgctcaga tgctgaagaa     120
ctacagtctg catttggcag aaatgaagat gaatttggat taaatgagga tgctgaagat     180
ttgcctcacc aaacaaaagt gaaacaactg agagaaaatt ttcaggaaaa aagacagtgg     240
ctcttgaagt atcagtcact tttgagaatg tttcttagtt actgcatact tcatggatcc     300
catggtgggg gtcttgcatc tgtaagaatg gaattgattt tgcttttgca agaatctcag     360
caggaaacat cagaaccact attttctagc cctctgtcag agcaaacctc agtgcctctc     420
ctctttgctt gt                                                         432


<210> 126
<211> 112
<212> DNA
<213> Homo sapien

<400> 126
acacaacttg aatagtaaaa tagaaactga gctgaaattt ctaattcact ttctaaccat      60
agtaagaatg atatttcccc ccagggatca ccaaatattt ataaaaattt gt             112


<210> 127
<211> 54
<212> DNA
<213> Homo sapien

<400> 127
accacgaaac cacaaacaag atggaagcat caatccactt gccaagcaca gcag            54


<210> 128
<211> 323
<212> DNA
<213> Homo sapien

<400> 128
acctcattag taattgtttt gttgtttcat tttttttctaa tgtctcccct ctaccagctc      60
acctgagata acagaatgaa aatggaagga cagccagatt tctcctttgc tctctgctca     120
ttctctctga agtctaggtt acccattttg gggacccatt ataggcaata aacacagttc     180
ccaaagcatt tggacagttt cttgttgtgt tttagaatgg ttttcctttt tcttagcctt     240
ttcctgcaaa aggctcactc agtcccttgc ttgctcagtg gactgggctc cccagggcct     300
aggctgcctt cttttccatg tcc                                             323


<210> 129
<211> 192
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
```

```
<222> (1)...(192)
<223> n = A,T,C or G

<400> 129
acatacatgt gtgtatattt ttaaatatca cttttgtatc actctgactt tttagcatac      60
tgaaaacaca ctaacataat ttntgtgaac catgatcaga tacaacccaa atcattcatc     120
tagcacattc atctgtgata naaagatagg tgagtttcat ttccttcacg ttggccaatg     180
gataaacaaa gt                                                         192


        <210> 130
        <211> 362
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(362)
        <223> n = A,T,C or G

        <400> 130
ccctttttta tggaatgagt agactgtatg tttgaanatt tanccacaac ctctttgaca      60
tataatgacg caacaaaaag gtgctgttta gtcctatggt tcagtttatg cccctgacaa     120
gtttccattg tgttttgccg atcttctggc taatcgtggt atcctccatg ttattagtaa     180
ttctgtattc cattttgtta acgcctggta gatgtaacct gctangaggc taactttata     240
cttatttaaa agctcttatt ttgtggtcat taaaatggca atttatgtgc agcactttat     300
tgcagcagga agcacgtgtg ggttggttgt aaagctcttt gctaatctta aaaagtaatg     360
gg                                                                   362


        <210> 131
        <211> 332
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(332)
        <223> n = A,T,C or G

        <400> 131
cttttтgaaa gatcgtgtcc actcctgtgg acatcttgtt ttaatggagt ttcccatgca      60
gtangactgg tatggttgca gctgtccaga taaaaacatt tgaagagctc caaaatgaga     120
gttctcccag gttcgccctg ctgctccaag tctcagcagc agcctctttt aggaggcatc     180
ttctgaacta gattaaggca gcttgtaaat ctgatgtgat ttggtttatt atccaactaa     240
cttccatctg ttatcactgg agaaagccca gactccccan gacnggtacg gattgtgggc     300
atanaaggat tgggtgaagc tggcgttgtg gt                                   332


        <210> 132
        <211> 322
        <212> DNA
        <213> Homo sapien
```

```
        <220>
        <221> misc_feature
        <222> (1)...(322)
        <223> n = A,T,C or G


        <400> 132
actttgcca ttttgtatat ataaacaatc ttgggacatt ctcctgaaaa ctaggtgtcc        60
agtggctaag agaactcgat ttcaagcaat tctgaaagga aaaccagcat gacacagaat       120
ctcaaattcc caaacagggg ctctgtggga aaaatgaggg aggacctttg tatctcgggt       180
tttagcaagt taaaatgaan atgacaggaa aggcttattt atcaacaaag agaagagttg       240
ggatgcttct aaaaaaaact ttggtagaga aaataggaat gctnaatcct agggaagcct       300
gtaacaatct acaattggtc ca                                               322


        <210> 133
        <211> 278
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(278)
        <223> n = A,T,C or G


        <400> 133
acaagccttc acaagtttaa ctaaattggg attaatcttt ctgtanttat ctgcataatt        60
cttgtttttc tttccatctg gctcctgggt tgacaatttg tggaaacaac tctattgcta       120
ctatttaaaa aaaatcacaa atctttccct ttaagctatg ttnaattcaa actattcctg       180
ctattcctgt tttgtcaaag aaattatatt tttcaaaata tgtntatttg tttgatgggt       240
cccacgaaac actaataaaa accacagaga ccagcctg                              278


        <210> 134
        <211> 121
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(121)
        <223> n = A,T,C or G


        <400> 134
gtttanaaaa cttgtttagc tccatagagg aaagaatgtt aaactttgta ttttaaaaca        60
tgattctctg aggttaaact tggttttcaa atgttatttt tacttgtatt ttgcttttgg       120
t                                                                      121


        <210> 135
        <211> 350
        <212> DNA
        <213> Homo sapien


        <220>
```

```
<221> misc_feature
<222> (1)...(350)
<223> n = A,T,C or G

<400> 135
acttanaacc atgcctagca catcagaatc cctcaaagaa catcagtata atcctatacc      60
atancaagtg gtgactggtt aagcgtgcga caaaggtcag ctggcacatt acttgtgtgc     120
aaacttgata cttttgttct aagtaggaac tagtatacag tncctaggan tggtactcca     180
gggtgccccc caactcctgc agccgctcct ctgtgccagn ccctgnaagg aactttcgct     240
ccacctcaat caagccctgg gccatgctac ctgcaattgg ctgaacaaac gtttgctgag     300
ttcccaagga tgcaaagcct ggtgctcaac tcctggggcg tcaactcagt                350


<210> 136
<211> 399
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 136
tgtaccgtga agacgacaga agttgcatgg cagggacagg gcagggccga ggccagggtt      60
gctgtgattg tatccgaata ntcctcgtga gaaaagataa tgagatgacg tgagcagcct     120
gcagacttgt gtctgccttc aanaagccag acaggaaggc cctgcctgcc ttggctctga     180
cctggcggcc agccagccag ccacaggtgg gcttcttcct tttgtggtga caacnccaag     240
aaaactgcag aggcccaggg tcaggtgtna gtgggtangt gaccataaaa caccaggtgc     300
tcccaggaac ccgggcaaag gccatcccca cctacagcca gcatgcccac tggcgtgatg     360
ggtgcagang gatgaagcag ccagntgttc tgctgtggt                            399


<210> 137
<211> 165
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(165)
<223> n = A,T,C or G

<400> 137
actggtgtgg tnggggggtga tgctggtggt anaagttgan gtgacttcan gatggtgtgt      60
ggaggaagtg tgtgaacgta gggatgtaga ngttttggcc gtgctaaatg agcttcggga     120
ttggctggtc ccactggtgg tcactgtcat tggtggggtt cctgt                     165


<210> 138
<211> 338
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(338)
<223> n = A,T,C or G

<400> 138
actcactgga atgccacatt cacaacagaa tcagaggtct gtgaaaacat taatggctcc      60
ttaacttctc cagtaagaat cagggacttg aaatggaaac gttaacagcc acatgcccaa     120
tgctgggcag tctcccatgc cttccacagt gaaagggctt gagaaaaatc acatccaatg     180
tcatgtgttt ccagccacac caaaaggtgc ttggggtgga gggctggggg catananggt     240
cangcctcag gaagcctcaa gttccattca gctttgccac tgtacattcc ccatntttaa     300
aaaaactgat gccttttttt ttttttttg taaaattc                             338


<210> 139
<211> 382
<212> DNA
<213> Homo sapien

<400> 139
gggaatcttg gttttggca tctggtttgc ctatagccga ggccactttg acagaacaaa      60
gaaagggact tcgagtaaga aggtgattta cagccagcct agtgcccgaa gtgaaggaga     120
attcaaacag acctcgtcat tcctggtgtg agcctggtcg gctcaccgcc tatcatctgc     180
atttgcctta ctcaggtgct accggactct ggcccctgat gtctgtagtt tcacaggatg     240
ccttatttgt cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat     300
gtcagctatg tgccccatcc tccttcatgc cctccctccc tttcctacca ctgctgagtg     360
gcctggaact tgtttaaagt gt                                             382


<210> 140
<211> 200
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(200)
<223> n = A,T,C or G

<400> 140
accaaanctt ctttctgttg tgttngattt tactataggg gtttngcttn ttctaaanat      60
acttttcatt taacancttt tgttaagtgt caggctgcac tttgctccat anaattattg     120
ttttcacatt tcaacttgta tgtgtttgtc tcttanagca ttggtgaaat cacatatttt     180
atattcagca taaaggagaa                                                200


<210> 141
<211> 335
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(335)
```

```
<223> n = A,T,C or G


<400> 141
actttatttt caaaacactc atatgttgca aaaaacacat agaaaaataa agtttggtgg        60
gggtgctgac taaacttcaa gtcacagact tttatgtgac agattggagc agggtttgtt       120
atgcatgtag agaacccaaa ctaatttatt aaacaggata gaaacaggct gtctgggtga       180
aatggttctg agaaccatcc aattcacctg tcagatgctg atanactagc tcttcagatg       240
tttttctacc agttcagaga tnggttaatg actanttcca atggggaaaa agcaagatgg       300
attcacaaac caagtaattt taaacaaaga cactt                                  335


    <210> 142
    <211> 459
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(459)
    <223> n = A,T,C or G


    <400> 142
accaggttaa tattgccaca tatatccttt ccaattgcgg gctaaacaga cgtgtattta        60
gggttgttta aagacaaccc agcttaatat caagagaaat tgtgaccttt catggagtat       120
ctgatggaga aaacactgag ttttgacaaa tcttatttta ttcagatagc agtctgatca       180
cacatggtcc aacaacactc aaataataaa tcaaatatna tcagatgtta aagattggtc       240
ttcaaacatc atagccaatg atgccccgct tgcctataat ctctccgaca taaaaccaca       300
tcaacacctc agtggccacc aaaccattca gcacagcttc cttaactgtg agctgtttga       360
agctaccagt ctgagcacta ttgactatnt ttttcangct ctgaatagct ctagggatct       420
cagccanggt gggaggaacc agctcaacct tggcgtant                              459


    <210> 143
    <211> 140
    <212> DNA
    <213> Homo sapien


    <400> 143
acatttcctt ccaccaagtc aggactcctg gcttctgtgg gagttcttat cacctgaggg        60
aaatccaaac agtctctcct agaaaggaat agtgtcacca accccaccca tctccctgag       120
accatccgac ttccctgtgt                                                   140


    <210> 144
    <211> 164
    <212> DNA
    <213> Homo sapien


    <220>
    <221> misc_feature
    <222> (1)...(164)
    <223> n = A,T,C or G


    <400> 144
```

```
acttcagtaa caacatacaa taacaacatt aagtgtatat tgccatcttt gtcattttct        60
atctatacca ctctcccttc tgaaaacaan aatcactanc caatcactta tacaaatttg       120
aggcaattaa tccatatttg ttttcaataa ggaaaaaaag atgt                        164
```

        <210> 145
        <211> 303
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(303)
        <223> n = A,T,C or G

        <400> 145
```
acgtagacca tccaactttg tatttgtaat ggcaaacatc cagnagcaat tcctaaacaa        60
actggagggt atttataccc aattatccca ttcattaaca tgccctcctc ctcaggctat       120
gcaggacagc tatcataagt cggcccaggc atccagatac taccatttgt ataaacttca       180
gtaggggagt ccatccaagt gacaggtcta atcaaaggag gaaatggaac ataagcccag       240
tagtaaaatn ttgcttagct gaaacagcca caaaagactt accgccgtgg tgattaccat       300
caa                                                                     303
```

        <210> 146
        <211> 327
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(327)
        <223> n = A,T,C or G

        <400> 146
```
actgcagctc aattagaagt ggtctctgac tttcatcanc ttctccctgg gctccatgac        60
actggcctgg agtgactcat tgctctggtt ggttgagaga gctcctttgc caacaggcct       120
ccaagtcagg gctgggattt gtttcctttc cacattctag caacaatatg ctggccactt       180
cctgaacagg gagggtggga ggagccagca tggaacaagc tgccactttc taaagtagcc       240
agacttgccc ctgggcctgt cacacctact gatgaccttc tgtgcctgca ggatggaatg       300
taggggtgag ctgtgtgact ctatggt                                           327
```

        <210> 147
        <211> 173
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(173)
        <223> n = A,T,C or G

        <400> 147

```
acattgtttt tttgagataa agcattgana gagctctcct taacgtgaca caatggaagg        60
actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt       120
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gtt             173
```

```
        <210> 148
        <211> 477
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(477)
        <223> n = A,T,C or G

        <400> 148
acaaccactt tatctcatcg aatttttaac ccaaactcac tcactgtgcc tttctatcct        60
atgggatata ttatttgatg ctccatttca tcacacatat atgaataata cactcatact       120
gccctactac ctgctgcaat aatcacattc ccttcctgtc ctgaccctga agccattggg       180
gtggtcctag tggccatcag tccangcctg caccttgagc ccttgagctc cattgctcac       240
nccancccac ctcaccgacc ccatcctctt acacagctac ctccttgctc tctaacccca       300
tagattatnt ccaaattcag tcaattaagt tactattaac actctacccg acatgtccag       360
caccactggt aagccttctc cagccaacac acacacacac acacncacac acacacatat       420
ccaggcacag gctacctcat cttcacaatc acccctttaa ttaccatgct atggtgg         477
```

```
        <210> 149
        <211> 207
        <212> DNA
        <213> Homo sapien

        <400> 149
acagttgtat tataatatca agaaataaac ttgcaatgag agcatttaag agggaagaac        60
taacgtattt tagagagcca aggaaggttt ctgtggggag tgggatgtaa ggtggggcct       120
gatgataaat aagagtcagc caggtaagtg ggtggtgtgg tatgggcaca gtgaagaaca       180
tttcaggcag agggaacagc agtgaaa                                           207
```

```
        <210> 150
        <211> 111
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(111)
        <223> n = A,T,C or G

        <400> 150
accttgattt cattgctgct ctgatggaaa cccaactatc taatttagct aaaacatggg        60
cacttaaatg tggtcagtgt ttggacttgt taactantgg catctttggg t               111
```

```
        <210> 151
        <211> 196
```

```
<212> DNA
<213> Homo sapien

<400> 151
agcgcggcag gtcatattga acattccaga tacctatcat tactcgatgc tgttgataac      60
agcaagatgg ctttgaactc agggtcacca ccagctattg gaccttacta tgaaaaccat     120
ggataccaac cggaaaaccc ctatcccgca cagcccactg tggtccccac tgtctacgag     180
gtgcatccgg ctcagt                                                     196


<210> 152
<211> 132
<212> DNA
<213> Homo sapien

<400> 152
acagcacttt cacatgtaag aagggagaaa ttcctaaatg taggagaaag ataacagaac      60
cttccccttt tcatctagtg gtggaaacct gatgctttat gttgacagga atagaaccag     120
gagggagttt gt                                                         132


<210> 153
<211> 285
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(285)
<223> n = A,T,C or G

<400> 153
acaanaccca nganaggcca ctggccgtgg tgtcatggcc tccaaacatg aaagtgtcag      60
cttctgctct tatgtcctca tctgacaact ctttaccatt tttatcctcg ctcagcagga     120
gcacatcaat aaagtccaaa gtcttggact tggccttggc ttggaggaag tcatcaacac     180
cctggctagt gagggtgcgg cgccgctcct ggatgacggc atctgtgaag tcgtgcacca     240
gtctgcaggc cctgtggaag cgccgtccac acggagtnag gaatt                     285


<210> 154
<211> 333
<212> DNA
<213> Homo sapien

<400> 154
accacagtcc tgttgggcca gggcttcatg accctttctg tgaaaagcca tattatcacc      60
accccaaatt tttccttaaa tatctttaac tgaaggggtc agcctcttga ctgcaaagac     120
cctaagccgg ttacacagct aactcccact ggccctgatt tgtgaaattg ctgctgcctg     180
attggcacag gagtcgaagg tgttcagctc ccctcctccg tggaacgaga ctctgatttg     240
agtttcacaa attctcgggc cacctcgtca ttgctcctct gaaataaaat ccggagaatg     300
gtcaggcctg tctcatccat atggatcttc cgg                                  333


<210> 155
<211> 308
```

```
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(308)
      <223> n = A,T,C or G

      <400> 155
actggaaata ataaaaccca catcacagtg ttgtgtcaaa gatcatcagg gcatggatgg          60
gaaagtgctt tgggaactgt aaagtgccta acacatgatc gatgattttt gttataatat         120
ttgaatcacg gtgcatacaa actctcctgc ctgctcctcc tgggccccag ccccagcccc         180
atcacagctc actgctctgt tcatccaggc ccagcatgta gtggctgatt cttcttggct         240
gcttttagcc tccanaagtt tctctgaagc caaccaaacc tctangtgta aggcatgctg         300
gccctggt                                                                   308

      <210> 156
      <211> 295
      <212> DNA
      <213> Homo sapien

      <400> 156
accttgctcg gtgcttggaa catattagga actcaaaata tgagatgata acagtgccta          60
ttattgatta ctgagagaac tgttagacat ttagttgaag attttctaca caggaactga         120
gaataggaga ttatgtttgg ccctcatatt ctctcctatc ctccttgcct cattctatgt         180
ctaatatatt ctcaatcaaa taaggttagc ataatcagga aatcgaccaa ataccaatat         240
aaaaccagat gtctatcctt aagattttca aatagaaaac aaattaacag actat             295

      <210> 157
      <211> 126
      <212> DNA
      <213> Homo sapien

      <400> 157
acaagtttaa atagtgctgt cactgtgcat gtgctgaaat gtgaaatcca ccacatttct          60
gaagagcaaa acaaattctg tcatgtaatc tctatcttgg gtcgtgggta tatctgtccc         120
cttagt                                                                     126

      <210> 158
      <211> 442
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(442)
      <223> n = A,T,C or G

      <400> 158
acccactggt cttggaaaca cccatcctta atacgatgat ttttctgtcg tgtgaaaatg          60
aanccagcag gctgccccta gtcagtcctt ccttccagag aaaaagagat ttgagaaagt         120
```

```
gcctgggtaa ttcaccatta atttcctccc ccaaactctc tgagtcttcc cttaatattt      180
ctggtggttc tgaccaaagc aggtcatggt ttgttgagca tttgggatcc cagtgaagta      240
natgtttgta gccttgcata cttagcccctt cccacgcaca aacggagtgg cagagtggtg      300
ccaaccctgt tttcccagtc cacgtagaca gattcacagt gcggaattct ggaagctgga      360
nacagacggg ctctttgcag agccgggact ctgagangga catgagggcc tctgcctctg      420
tgttcattct ctgatgtcct gt                                               442
```

        <210> 159
        <211> 498
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(498)
        <223> n = A,T,C or G

        <400> 159

```
acttccaggt aacgttgttg tttccgttga gcctgaactg atgggtgacg ttgtaggttc       60
tccaacaaga actgaggttg cagagcgggt agggaagagt gctgttccag ttgcacctgg      120
gctgctgtgg actgttgttg attcctcact acggcccaag gttgtggaac tggcanaaag      180
gtgtgttgtt gganttgagc tcgggcggct gtggtaggtt gtgggctctt caacaggggc      240
tgctgtggtg ccgggangtg aangtgttgt gtcacttgag cttggccagc tctggaaagt      300
antanattct tcctgaaggc cagcgcttgt ggagctggca ngggtcantg ttgtgtgtaa      360
cgaaccagtg ctgctgtggg tgggtgtana tcctccacaa agcctgaagt tatggtgtcn      420
tcaggtaana atgtggtttc agtgtccctg ggcngctgtg gaaggttgta nattgtcacc      480
aagggaataa gctgtggt                                                    498
```

        <210> 160
        <211> 380
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(380)
        <223> n = A,T,C or G

        <400> 160

```
acctgcatcc agcttccctg ccaaactcac aaggagacat caacctctag acagggaaac       60
agcttcagga tacttccagg agacagagcc accagcagca aacaaatat tcccatgcct      120
ggagcatggc atagaggaag ctganaaatg tggggtctga ggaagccatt tgagtctggc      180
cactagacat ctcatcagcc acttgtgtga agagatgccc catgacccca gatgcctctc      240
ccacccttac ctccatctca cacacttgag ctttccactc tgtataattc taacatcctg      300
gagaaaaatg gcagtttgac cgaacctgtt cacaacggta gaggctgatt tctaacgaaa      360
cttgtagaat gaagcctgga                                                 380
```

        <210> 161
        <211> 114
        <212> DNA
        <213> Homo sapien

<400> 161
actccacatc ccctctgagc aggcggttgt cgttcaaggt gtatttggcc ttgcctgtca   60
cactgtccac tggccccta tccacttggt gcttaatccc tcgaaagagc atgt   114

        <210> 162
        <211> 177
        <212> DNA
        <213> Homo sapien

        <400> 162
actttctgaa tcgaatcaaa tgatacttag tgtagtttta atatcctcat atatatcaaa   60
gttttactac tctgataatt ttgtaaacca ggtaaccaga acatccagtc atacagcttt   120
tggtgatata taacttggca ataacccagt ctggtgatac ataaaactac tcactgt   177

        <210> 163
        <211> 137
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(137)
        <223> n = A,T,C or G

        <400> 163
catttataca gacaggcgtg aagacattca cgacaaaaac gcgaaattct atcccgtgac   60
canagaaggc agctacggct actcctacat cctggcgtgg gtggccttcg cctgcacctt   120
catcagcggc atgatgt   137

        <210> 164
        <211> 469
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(469)
        <223> n = A,T,C or G

        <400> 164
cttatcacaa tgaatgttct cctgggcagc gttgtgatct ttgccacctt cgtgacttta   60
tgcaatgcat catgctattt catacctaat gagggagttc caggagattc aaccaggaaa   120
tgcatggatc tcaaaggaaa caaacaccca ataaactcgg agtggcagac tgacaactgt   180
gagacatgca cttgctacga aacagaaatt tcatgttgca cccttgtttc tacacctgtg   240
ggttatgaca aagacaactg ccaaagaatc ttcaagaagg aggactgcaa gtatatcgtg   300
gtggagaaga aggacccaaa aaagacctgt tctgtcagtg aatggataat ctaatgtgct   360
tctagtaggc acaggctcc caggccaggc ctcattctcc tctggcctct aatagtcaat   420
gattgtgtag ccatgcctat cagtaaaaag atntttgagc aaacacttt   469

        <210> 165

```
<211> 195
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(195)
<223> n = A,T,C or G

<400> 165
acagtttttt atanatatcg acattgccgg cacttgtgtt cagtttcata aagctggtgg        60
atccgctgtc atccactatt ccttggctag agtaaaaatt attcttatag cccatgtccc       120
tgcaggccgc ccgcccgtag ttctcgttcc agtcgtcttg gcacacaggg tgccaggact       180
tcctctgaga tgagt                                                        195


<210> 166
<211> 383
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 166
acatcttagt agtgtggcac atcagggggc catcagggtc acagtcactc atagcctcgc        60
cgaggtcgga gtccacacca ccggtgtagg tgtgctcaat cttgggcttg gcgcccacct       120
ttggagaagg gatatgctgc acacacatgt ccacaaagcc tgtgaactcg ccaaagaatt       180
tttgcagacc agcctgagca aggggcggat gttcagcttc agctcctcct tcgtcaggtg       240
gatgccaacc tcgtctangg tccgtgggaa gctggtgtcc acntcaccta caacctgggc       300
gangatctta taaagaggct ccnagataaa ctccacgaaa cttctctggg agctgctagt       360
nggggccttt ttggtgaact ttc                                                383


<210> 167
<211> 247
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(247)
<223> n = A,T,C or G

<400> 167
acagagccag accttggcca taaatgaanc agagattaag actaaacccc aagtcganat        60
tggagcagaa actggagcaa gaagtgggcc tggggctgaa gtagagacca aggccactgc       120
tatanccata cacagagcca actctcaggc caaggcnatg gttggggcag anccagagac       180
tcaatctgan tccaaagtgg tggctggaac actggtcatg acanaggcag tgactctgac       240
tgangtc                                                                  247
```

```
<210> 168
<211> 273
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(273)
<223> n = A,T,C or G

<400> 168
acttctaagt tttctagaag tggaaggatt gtantcatcc tgaaaatggg tttacttcaa      60
aatccctcan ccttgttctt cacnactgtc tatactgana gtgtcatgtt tccacaaagg     120
gctgacacct gagcctgnat tttcactcat ccctgagaag ccctttccag tagggtgggc     180
aattcccaac ttccttgcca caagcttccc aggctttctc ccctggaaaa ctccagcttg     240
agtcccagat acactcatgg gctgccctgg gca                                  273


<210> 169
<211> 431
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 169
acagccttgg cttccccaaa ctccacagtc tcagtgcaga aagatcatct tccagcagtc      60
agctcagacc agggtcaaag gatgtgacat caacagtttc tggtttcaga acaggttcta     120
ctactgtcaa atgacccccc atacttcctc aaaggctgtg gtaagttttg cacaggtgag     180
ggcagcagaa aggggggtant tactgatgga caccatcttc tctgtatact ccacactgac     240
cttgccatgg gcaaaggccc ctaccacaaa aacaatagga tcactgctgg gcaccagctc     300
acgcacatca ctgacaaccg ggatggaaaa agaantgcca actttcatac atccaactgg     360
aaagtgatct gatactggat tcttaattac cttcaaaagc ttctgggggc catcagctgc     420
tcgaacactg a                                                          431


<210> 170
<211> 266
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(266)
<223> n = A,T,C or G

<400> 170
acctgtgggc tgggctgtta tgcctgtgcc ggctgctgaa agggagttca gaggtggagc      60
tcaaggagct ctgcaggcat tttgccaanc ctctccanag canagggagc aacctacact     120
ccccgctaga aagacaccag attggagtcc tgggaggggg agttggggtg ggcatttgat     180
```

```
gtatacttgt cacctgaatg aangagccag agaggaanga gacgaanatg anattggcct      240
tcaaagctag gggtctggca ggtgga                                          266
```

```
<210> 171
<211> 1248
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1248)
<223> n = A,T,C or G

<400> 171
ggcagccaaa tcataaacgg cgaggactgc agcccgcact cgcagccctg gcaggcggca       60
ctggtcatgg aaaacgaatt gttctgctcg ggcgtcctgg tgcatccgca gtgggtgctg      120
tcagccgcac actgtttcca gaagtgagtg cagagctcct acaccatcgg gctgggcctg      180
cacagtcttg aggccgacca agagccaggg agccagatgg tggaggccag cctctccgta      240
cggcacccag agtacaacag acccttgctc gctaacgacc tcatgctcat caagttggac      300
gaatccgtgt ccgagtctga caccatccgg agcatcagca ttgcttcgca gtgccctacc      360
gcggggaact cttgcctcgt ttctggctgg ggtctgctgg cgaacggcag aatgcctacc      420
gtgctgcagt gcgtgaacgt gtcggtggtg tctgaggagg tctgcagtaa gctctatgac      480
ccgctgtacc accccagcat gttctgcgcc ggcggagggc aagaccagaa ggactcctgc      540
aacggtgact ctggggggcc cctgatctgc aacgggtact tgcagggcct tgtgtctttc      600
ggaaaagccc cgtgtggcca agttggcgtg ccaggtgtct acaccaacct ctgcaaattc      660
actgagtgga tagagaaaac cgtccaggcc agttaactct ggggactggg aacccatgaa      720
attgacccct aaatacatcc tgcggaagga attcaggaat atctgttccc agcccctcct      780
ccctcaggcc caggagtcca ggcccccagc ccctcctccc tcaaaccaag ggtacagatc      840
cccagcccct cctccctcag acccaggagt ccagacccccc cagcccctcc tccctcagac      900
ccaggagtcc agcccctcct ccctcagacc caggagtcca gacccccag ccctcctcc      960
ctcagaccca ggggtccagg cccccaaccc ctcctccctc agactcagag gtccaagccc     1020
ccaacccntc attccccaga cccagaggtc caggtcccag ccctctntcc ctcagaccca     1080
gcggtccaat gccacctaga ctntccctgt acacagtgcc cccttgtggc acgttgaccc     1140
aaccttacca gttggttttt cattttntgt ccctttcccc tagatccaga aataaagttt     1200
aagagaagng caaaaaaaaa aaaaaaaaa aaaaaaaa aaaaaaaa                     1248
```

```
<210> 172
<211> 159
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(159)
<223> Xaa = Any Amino Acid

<400> 172
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro
1               5                   10                  15
Leu Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser
                20                  25                  30
```

```
Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr
        35              40              45
Ala Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly
    50              55              60
Arg Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu
65              70              75              80
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe
            85              90              95
Cys Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser
            100             105             110
Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe
        115             120             125
Gly Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn          .
    130             135             140
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
145             150             155
```

```
        <210> 173
        <211> 1265
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(1265)
        <223> n = A,T,C or G

        <400> 173
ggcagcccgc actcgcagcc ctggcaggcg gcactggtca tggaaaacga attgttctgc         60
tcgggcgtcc tggtgcatcc gcagtgggtg ctgtcagccg cacactgttt ccagaactcc        120
tacaccatcg ggctgggcct gcacagtctt gaggccgacc aagagccagg gagccagatg        180
gtggaggcca gcctctccgt acggcaccca gagtacaaca gacccttgct cgctaacgac        240
ctcatgctca tcaagttgga cgaatccgtg tccgagtctg acaccatccg gagcatcagc        300
attgcttcgc agtgccctac cgcggggaac tcttgcctcg tttctggctg gggtctgctg        360
gcgaacggtg agctcacggg tgtgtgtctg ccctcttcaa ggaggtcctc tgcccagtcg        420
cggggctga cccagagctc tgcgtcccag gcagaatgcc taccgtgctg cagtgcgtga        480
acgtgtcggt ggtgtctgag gaggtctgca gtaagctcta tgacccgctg taccacccca        540
gcatgttctg cgccggcgga gggcaagacc agaaggactc ctgcaacggt gactctgggg        600
ggcccctgat ctgcaacggg tacttgcagg gccttgtgtc tttcggaaaa gccccgtgtg        660
gccaagttgg cgtgccaggt gtctacacca acctctgcaa attcactgag tggatagaga        720
aaaccgtcca ggccagttaa ctctggggac tgggaaccca tgaaattgac ccccaaatac        780
atcctgcgga aggaattcag gaatatctgt tcccagcccc tcctccctca ggcccaggag        840
tccaggcccc cagcccctcc tccctcaaac caagggtaca gatccccagc ccctcctccc        900
tcagacccag gagtccagac cccccagccc ctcctccctc agacccagga gtccagcccc        960
tcctccntca gacccaggag tccagacccc ccagccctc ctccctcaga cccagggggtt       1020
gaggccccca acccctcctc cttcagagtc agaggtccaa gccccaacc cctcgttccc       1080
cagacccaga ggtnnaggtc ccagcccctc ttccntcaga cccagnggtc caatgccacc       1140
tagattttcc ctgnacacag tgcccccttg tggnangttg acccaacctt accagttggt       1200
ttttcatttt tngtccctttt cccctagatc cagaaataaa gtttaagaga ngngcaaaaa       1260
aaaaa                                                                     1265
```

```
<210> 174
<211> 1459
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1459)
<223> n = A,T,C or G

<400> 174
ggtcagccgc acactgtttc cagaagtgag tgcagagctc ctacaccatc gggctgggcc        60
tgcacagtct tgaggccgac caagagccag ggagccagat ggtggaggcc agcctctccg       120
tacggcaccc agagtacaac agacccttgc tcgctaacga cctcatgctc atcaagttgg       180
acgaatccgt gtccgagtct gacaccatcc ggagcatcag cattgcttcg cagtgcccta       240
ccgcggggaa ctcttgcctc gtttctggct ggggtctgct ggcgaacggt gagctcacgg       300
gtgtgtgtct gccctcttca aggaggtcct ctgcccagtc gcggggctg acccagagct        360
ctgcgtccca ggcagaatgc ctaccgtgct gcagtgcgtg aacgtgtcgg tggtgtctga       420
ngaggtctgc antaagctct atgacccgct gtaccacccc ancatgttct cgccggcgg        480
agggcaagac cagaaggact cctgcaacgt gagagagggg aaggggagg gcaggcgact        540
cagggaaggg tggagaaggg ggagacagag acacacaggg ccgcatggcg agatgcagag       600
atggagagac acacagggag acagtgacaa ctagagagag aaactgagag aaacagagaa       660
ataaacacag gaataaagag aagcaaagga agagagaaac agaaacagac atggggaggc       720
agaaacacac acacatagaa atgcagttga ccttccaaca gcatggggcc tgagggcggt       780
gacctccacc caatagaaaa tcctcttata acttttgact ccccaaaaac ctgactagaa       840
atagcctact gttgacgggg agccttacca ataacataaa tagtcgattt atgcatacgt       900
tttatgcatt catgatatac ctttgttgga attttttgat atttctaagc tacacagttc       960
gtctgtgaat ttttttaaat tgttgcaact ctcctaaaat ttttctgatg tgtttattga      1020
aaaaatccaa gtataagtgg acttgtgcat tcaaaccagg gttgttcaag ggtcaactgt      1080
gtacccagag ggaaacagtg acacagattc atagaggtga aacacgaaga gaaacaggaa      1140
aaatcaagac tctacaaaga ggctgggcag ggtggctcat gcctgtaatc ccagcacttt      1200
gggaggcgag gcaggcagat cacttgaggt aaggagttca agaccagcct ggccaaaatg      1260
gtgaaatcct gtctgtacta aaaatacaaa agttagctgg atatggtggc aggcgcctgt      1320
aatcccagct acttgggagg ctgaggcagg agaattgctt gaatatggga ggcagaggtt      1380
gaagtgagtt gagatcacac cactatactc cagctggggc aacagagtaa gactctgtct      1440
caaaaaaaaa aaaaaaaaa                                                    1459


<210> 175
<211> 1167
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1167)
<223> n = A,T,C or G

<400> 175
gcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg        60
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg       120
ctgggcctgc acagtcttga ggccgaccaa gagccaggga ccagatggt ggaggccagc        180
```

```
ctctccgtac ggcacccaga gtacaacaga ctcttgctcg ctaacgacct catgctcatc    240
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag    300
tgccctaccg cggggaactc ttgcctcgtn tctggctggg gtctgctggc gaacggcaga    360
atgcctaccg tgctgcactg cgtgaacgtg tcggtggtgt ctgaggangt ctgcagtaag    420
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg cggagggca agaccagaag    480
gactcctgca acggtgactc tggggggccc ctgatctgca cgggtactt gcagggcctt    540
gtgtctttcg gaaaagcccc gtgtggccaa cttggcgtgc caggtgtcta caccaacctc    600
tgcaaattca ctgagtggat agagaaaacc gtccagncca gttaactctg gggactggga    660
acccatgaaa ttgaccccca aatacatcct gcggaangaa ttcaggaata tctgttccca    720
gcccctcctc cctcaggccc aggagtccag gcccccagcc cctcctccct caaaccaagg    780
gtacagatcc ccagcccctc ctccctcaga cccaggagtc cagacccccc agccctctcnt    840
ccntcagacc caggagtcca gcccctcctc cntcagacgc aggagtccag acccccagc    900
ccntcntccg tcagacccag gggtgcaggc ccccaacccc tcntcntca gagtcagagg    960
tccaagcccc caacccctcg ttccccagac ccagaggtnc aggtcccagc ccctcctccc   1020
tcagacccag cggtccaatg ccacctagan tntccctgta cacagtgccc ccttgtggca   1080
ngttgacccca accttaccag ttggtttttc attttttgtc cctttcccct agatccagaa   1140
ataaagtnta agagaagcgc aaaaaaa                                        1167
```

<210> 176
<211> 205
<212> PRT
<213> Homo sapien

<220>
<221> VARIANT
<222> (1)...(205)
<223> Xaa = Any Amino Acid

<400> 176

```
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
 1               5                  10                  15
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
            20                  25                  30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
            35                  40                  45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Leu Leu Leu
        50                  55                  60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
65                  70                  75                  80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
                85                  90                  95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met
            100                 105                 110
Pro Thr Val Leu His Cys Val Asn Val Ser Val Val Ser Glu Xaa Val
            115                 120                 125
Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala
    130                 135                 140
Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly
145                 150                 155                 160
Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys
                165                 170                 175
```

```
Ala Pro Cys Gly Gln Leu Gly Val Pro Gly Val Tyr Thr Asn Leu Cys
            180                 185                 190
Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Xaa Ser
            195                 200                 205
```

```
        <210> 177
        <211> 1119
        <212> DNA
        <213> Homo sapien

        <400> 177
gcgcactcgc agccctggca ggcggcactg gtcatggaaa acgaattgtt ctgctcgggc      60
gtcctggtgc atccgcagtg ggtgctgtca gccgcacact gtttccagaa ctcctacacc     120
atcgggctgg gcctgcacag tcttgaggcc gaccaagagc cagggagcca gatggtggag     180
gccagcctct ccgtacggca cccagagtac aacagaccct tgctcgctaa cgacctcatg     240
ctcatcaagt tggacgaatc cgtgtccgag tctgacacca tccggagcat cagcattgct     300
tcgcagtgcc ctaccgcggg gaactcttgc ctcgtttctg ctggggtct gctggcgaac      360
gatgctgtga ttgccatcca gtcccagact gtgggaggct gggagtgtga gaagctttcc     420
caaccctggc agggttgtac catttcggca acttccagtg caaggacgtc ctgctgcatc     480
ctcactgggt gctcactact gctcactgca tcacccggaa cactgtgatc aactagccag     540
caccatagtt ctccgaagtc agactatcat gattactgtg ttgactgtgc tgtctattgt     600
actaaccatg ccgatgttta ggtgaaatta gcgtcacttg gcctcaacca tcttggtatc     660
cagttatcct cactgaattg agatttcctg cttcagtgtc agccattccc acataatttc     720
tgacctacag aggtgaggga tcatatagct cttcaaggat gctggtactc ccctcacaaa     780
ttcatttctc ctgttgtagt gaaaggtgcg ccctctggag cctcccaggg tgggtgtgca     840
ggtcacaatg atgaatgtat gatcgtgttc ccattaccca aagcctttaa atccctcatg     900
ctcagtacac cagggcaggt ctagcatttc ttcatttagt gtatgctgtc cattcatgca     960
accacctcag gactcctgga ttctctgcct agttgagctc ctgcatgctg cctccttggg    1020
gaggtgaggg agagggccca tggttcaatg ggatctgtgc agttgtaaca cattaggtgc    1080
ttaataaaca gaagctgtga tgttaaaaaa aaaaaaaaa                          1119
```

```
        <210> 178
        <211> 164
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(164)
        <223> Xaa = Any Amino Acid

        <400> 178
Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp
1               5                   10                  15
Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu
            20                  25                  30
Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val
            35                  40                  45
Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu
        50                  55                  60
Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser
```

```
65                      70                      75                      80
Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly
                    85                      90                      95
Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Asp Ala Val
                100                     105                     110
Ile Ala Ile Gln Ser Xaa Thr Val Gly Gly Trp Glu Cys Glu Lys Leu
            115                     120                     125
Ser Gln Pro Trp Gln Gly Cys Thr Ile Ser Ala Thr Ser Ser Ala Arg
        130                     135                     140
Thr Ser Cys Cys Ile Leu Thr Gly Cys Ser Leu Leu Leu Thr Ala Ser
145                     150                     155                     160
Pro Gly Thr Leu
```

```
        <210> 179
        <211> 250
        <212> DNA
        <213> Homo sapien

        <400> 179
ctggagtgcc ttggtgtttc aagcccctgc aggaagcaga atgcaccttc tgaggcacct    60
ccagctgccc ccggccgggg gatgcgaggc tcggagcacc cttgcccggc tgtgattgct   120
gccaggcact gttcatctca gctttttctgt ccctttgctc ccggcaagcg cttctgctga   180
aagttcatat ctggagcctg atgtcttaac gaataaaggt cccatgctcc acccgaaaaa   240
aaaaaaaaaa                                                          250
```

```
        <210> 180
        <211> 202
        <212> DNA
        <213> Homo sapien

        <400> 180
actagtccag tgtggtggaa ttccattgtg ttgggcccaa cacaatggct acctttaaca    60
tcacccagac cccgcccctg cccgtgcccc acgctgctgc taacgacagt atgatgctta   120
ctctgctact cggaaactat ttttatgtaa ttaatgtatg ctttcttgtt tataaatgcc   180
tgatttaaaa aaaaaaaaaa aa                                            202
```

```
        <210> 181
        <211> 558
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(558)
        <223> n = A,T,C or G

        <400> 181
tccytttgkt naggtttkkg agacamccck agacctwaan ctgtgtcaca gacttcyngg    60
aatgtttagg cagtgctagt aatttcytcg taatgattct gttattactt tcctnattct   120
ttattcctct ttcttctgaa gattaatgaa gttgaaaatt gaggtggata aatacaaaaa   180
```

```
ggtagtgtga tagtataagt atctaagtgc agatgaaagt gtgttatata tatccattca      240
aaaattatgca agttagtaat tactcagggt taactaaatt actttaatat gctgttgaac      300
ctactctgtt ccttggctag aaaaaattat aaacaggact ttgttagttt gggaagccaa      360
attgataata ttctatgttc taaaagttgg gctatacata aattattaag aaatatggaw      420
ttttattccc aggaatatgg kgttcatttt atgaatatta cscrggatag awgtwtgagt      480
aaaaycagtt ttggtwaata ygtwaatatg tcmtaaataa acaakgcttt gacttatttc      540
caaaaaaaaa aaaaaaaa                                                     558
```

```
        <210> 182
        <211> 479
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(479)
        <223> n = A,T,C or G

        <400> 182
acagggwttk grggatgcta agsccccrga rwtygtttga tccaaccctg gcttwttttc       60
agaggggaaa atggggccta gaagttacag mscatytagy tggtgcgmtg gcacccctgg      120
cstcacacag astcccgagt agctgggact acaggcacac agtcactgaa gcaggccctg      180
ttwgcaattc acgttgccac ctccaactta aacattcttc atatgtgatg tccttagtca      240
ctaaggttaa actttcccac ccagaaaagg caacttagat aaaatcttag agtactttca      300
tactmttcta agtcctcttc cagcctcact kkgagtcctm cytggggggtt gataggaant      360
ntctcttggc tttctcaata aartctctat ycatctcatg tttaatttgg tacgcatara      420
awtgstgara aaattaaaat gttctggtty mactttaaaa araaaaaaaa aaaaaaaaa       479
```

```
        <210> 183
        <211> 384
        <212> DNA
        <213> Homo sapien

        <400> 183
aggcgggagc agaagctaaa gccaaagccc aagaagagtg gcagtgccag cactggtgcc       60
agtaccagta ccaataacag tgccagtgcc agtgccagca ccagtggtgg cttcagtgct      120
ggtgccagcc tgaccgccac tctcacattt gggctcttcg ctggccttgg tggagctggt      180
gccagcacca gtggcagctc tggtgcctgt ggtttctcct acaagtgaga ttttagatat      240
tgttaatcct gccagtcttt ctcttcaagc cagggtgcat cctcagaaac ctactcaaca      300
cagcactcta ggcagccact atcaatcaat tgaagttgac actctgcatt aratctattt      360
gccatttcaa aaaaaaaaa aaaa                                              384
```

```
        <210> 184
        <211> 496
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(496)
        <223> n = A,T,C or G
```

<400> 184

```
accgaattgg gaccgctggc ttataagcga tcatgtyynt ccrgtatkac ctcaacgagc      60
agggagatcg agtctatacg ctgaagaaat ttgacccgat gggacaacag acctgctcag     120
cccatcctgc tcggttctcc ccagatgaca aatactctsg acaccgaatc accatcaaga     180
aacgcttcaa ggtgctcatg acccagcaac cgcgccctgt cctctgaggg tcccttaaac     240
tgatgtcttt tctgccacct gttacccctc ggagactccg taaccaaact cttcggactg     300
tgagccctga tgcctttttg ccagccatac tctttggcat ccagtctctc gtggcgattg     360
attatgcttg tgtgaggcaa tcatggtggc atcacccata aagggaacac atttgacttt     420
tttttctcat attttaaatt actacmagaw tattwmagaw waaatgawtt gaaaaactst     480
taaaaaaaaa aaaaa                                                      496
```

<210> 185
<211> 384
<212> DNA
<213> Homo sapien

<400> 185

```
gctggtagcc tatggcgkgg cccacggagg ggctcctgag gccacggrac agtgacttcc      60
caagtatcyt gcgcsgcgtc ttctaccgtc cctacctgca gatcttcggg cagattcccc     120
aggaggacat ggacgtggcc ctcatggagc acagcaactg ytcgtcggag cccggcttct     180
gggcacaccc tcctggggcc caggcgggca cctgcgtctc ccagtatgcc aactggctgg     240
tggtgctgct cctcgtcatc ttcctgctcg tggccaacat cctgctggtc aacttgctca     300
ttgccatgtt cagttacaca ttcggcaaag tacagggcaa cagcgatctc tactgggaag     360
gcgcagcgtt accgcctcat ccgg                                           384
```

<210> 186
<211> 577
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(577)
<223> n = A,T,C or G

<400> 186

```
gagttagctc ctccacaacc ttgatgaggt cgtctgcagt ggcctctcgc ttcataccgc      60
tnccatcgtc atactgtagg tttgccacca cytcctggca tcttggggcg gcntaatatt     120
ccaggaaact ctcaatcaag tcaccgtcga tgaaacctgt gggctggttc tgtcttccgc     180
tcggtgtgaa aggatctccc agaaggagtg ctcgatcttc cccacacttt tgatgacttt     240
attgagtcga ttctgcatgt ccagcaggag gttgtaccag ctctctgaca gtgaggtcac     300
cagccctatc atgccgttga mcgtgccgaa garcaccgag ccttgtgtgg gggkkgaagt     360
ctcacccaga ttctgcatta ccagagagcc gtggcaaaag acattgacaa actcgcccag     420
gtggaaaaag amcamctcct ggargtgctn gccgctcctc gtcmgttggt ggcagcgctw     480
tccttttgac acacaaacaa gttaaaggca ttttcagccc ccagaaantt gtcatcatcc     540
aagatntcgc acagcactna tccagttggg attaaat                             577
```

<210> 187
<211> 534
<212> DNA

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(534)
<223> n = A,T,C or G

<400> 187
```
aacatcttcc tgtataatgc tgtgtaatat cgatccgatn ttgtctgstg agaatycatw      60
actkggaaaa gmaacattaa agcctggaca ctggtattaa aattcacaat atgcaacact     120
ttaaacagtg tgtcaatctg ctcccyynac tttgtcatca ccagtctggg aakaagggta     180
tgccctattc acacctgtta aaagggcgct aagcattttt gattcaacat cttttttttt     240
gacacaagtc cgaaaaaagc aaaagtaaac agttatyaat ttgttagcca attcactttc     300
ttcatgggac agagccatyt gatttaaaaa gcaaattgca taatattgag cttygggagc     360
tgatatttga gcggaagagt agcctttcta cttcaccaga cacaactccc tttcatattg     420
ggatgttnac naaagtwatg tctctwacag atgggatgct tttgtggcaa ttctgttctg     480
aggatctccc agtttattta ccacttgcac aagaaggcgt tttcttcctc aggc          534
```

<210> 188
<211> 761
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(761)
<223> n = A,T,C or G

<400> 188
```
agaaaccagt atctctnaaa acaacctctc ataccttgtg gacctaattt tgtgtgcgtg      60
tgtgtgtgcg cgcatattat atagacaggc acatcttttt tacttttgta aaagcttatg     120
cctctttggt atctatatct gtgaaagttt taatgatctg ccataatgtc ttggggacct     180
ttgtcttctg tgtaaatggt actagagaaa acacctatnt tatgagtcaa tctagttngt     240
tttattcgac atgaaggaaa tttccagatn acaacactna caaactctcc ctkgackarg     300
ggggacaaag aaaagcaaaa ctgamcataa raaacaatwa cctggtgaga arttgcataa     360
acagaaatwr ggtagtatat tgaarnacag catcattaaa rmgttwtktt wttctccctt     420
gcaaaaaaca tgtacngact tcccgttgag taatgccaag ttgttttttt tatnataaaa     480
cttgcccttc attacatgtt tnaaagtggt gtggtgggcc aaaatattga aatgatggaa     540
ctgactgata aagctgtaca aataagcagt gtgcctaaca agcaacacag taatgttgac     600
atgcttaatt cacaaatgct aatttcatta taaatgtttg ctaaaataca ctttgaacta     660
tttttctgtn ttcccagagc tgagatntta gattttatgt agtatnaagt gaaaaantac     720
gaaaataata acattgaaga aaaananaaa aaanaaaaaa a                         761
```

<210> 189
<211> 482
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)

<223> n = A,T,C or G

<400> 189

```
tttttttttt tttgccgatn ctactatttt attgcaggan gtgggggtgt atgcaccgca      60
caccggggct atnagaagca agaaggaagg agggagggca cagccccttg ctgagcaaca     120
aagccgcctg ctgccttctc tgtctgtctc ctggtgcagg cacatgggga gaccttcccc     180
aaggcagggg ccaccagtcc aggggtggga atacaggggg tgggangtgt gcataagaag     240
tgataggcac aggccacccg gtacagaccc ctcggctcct gacaggtnga tttcgaccag     300
gtcattgtgc cctgcccagg cacagcgtan atctggaaaa gacagaatgc tttccttttc     360
aaatttggct ngtcatngaa ngggcanttt tccaanttng gctnggtctt ggtacncttg     420
gttcggccca gctccncgtc caaaaantat tcacccnnct ccnaattgct tgcnggnccc     480
cc                                                                     482
```

<210> 190
<211> 471
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(471)
<223> n = A,T,C or G

<400> 190

```
tttttttttt ttttaaaaca gttttttcaca acaaaattta ttagaagaat agtggttttg      60
aaaactctcg catccagtga gaactaccat acaccacatt acagctngga atgtnctcca     120
aatgtctggt caaatgatac aatggaacca ttcaatctta cacatgcacg aaagaacaag     180
cgcttttgac atacaatgca caaaaaaaaa aggggggggg gaccacatgg attaaaattt     240
taagtactca tcacatacat taagacacag ttctagtcca gtcnaaaatc agaactgcnt     300
tgaaaaattt catgtatgca atccaaccaa agaacttnat tggtgatcat gantnctcta     360
ctacatcnac cttgatcatt gccaggaacn aaaagttnaa ancacncngt acaaaaanaa     420
tctgtaattn anttcaacct ccgtacngaa aaatnttnnt tatacactcc c              471
```

<210> 191
<211> 402
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(402)
<223> n = A,T,C or G

<400> 191

```
gagggattga aggtctgttc tastgtcggm ctgttcagcc accaactcta acaagttgct      60
gtcttccact cactgtctgt aagcttttta acccagacwg tatcttcata aatagaacaa     120
attcttcacc agtcacatct tctaggacct ttttggattc agttagtata agctcttcca     180
cttcctttgt taagacttca tctggtaaag tcttaagttt tgtagaaagg aattyaattg     240
ctcgttctct aacaatgtcc tctccttgaa gtatttggct gaacaaccca cctaaagtcc     300
ctttgtgcat ccattttaaa tatacttaat agggcattgk tncactaggt taaattctgc     360
aagagtcatc tgtctgcaaa agttgcgtta gtatatctgc ca                        402
```

```
<210> 192
<211> 601
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(601)
<223> n = A,T,C or G

<400> 192
gagctcggat ccaataatct ttgtctgagg gcagcacaca tatncagtgc catggnaact      60
ggtctacccc acatgggagc agcatgccgt agntatataa ggtcattccc tgagtcagac     120
atgcytyttt gaytaccgtg tgccaagtgc tggtgattct yaacacacyt ccatcccgyt     180
cttttgtgga aaaactggca cttktctgga actagcarga catcacttac aaattcaccc     240
acgagacact tgaaaggtgt aacaaagcga ytcttgcatt gcttttgtc cctccggcac      300
cagttgtcaa tactaacccg ctggtttgcc tccatcacat ttgtgatctg tagctctgga     360
tacatctcct gacagtactg aagaacttct tcttttgttt caaaagcarc tcttggtgcc     420
tgttggatca ggttcccatt tcccagtcyg aatgttcaca tggcatattt wacttcccac     480
aaaacattgc gatttgaggc tcagcaacag caaatcctgt tccggcattg gctgcaagag     540
cctcgatgta gccggccagc gccaaggcag gcgccgtgag ccccaccagc agcagaagca     600
g                                                                     601
```

```
<210> 193
<211> 608
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(608)
<223> n = A,T,C or G

<400> 193
atacagccca natcccacca cgaagatgcg cttgttgact gagaacctga tgcggtcact      60
ggtcccgctg tagccccagc gactctccac ctgctggaag cggttgatgc tgcactcytt     120
cccaacgcag gcagmagcgg gsccggtcaa tgaactccay tcgtggcttg gggtkgacgg     180
tkaagtgcag gaagaggctg accacctcgc ggtccaccag gatgcccgac tgtgcgggac     240
ctgcagcgaa actcctcgat ggtcatgagc gggaagcgaa tgaggcccag ggccttgccc     300
agaaccttcc gcctgttctc tggcgtcacc tgcagctgct gccgctgaca ctcggcctcg     360
gaccagcgga caaacggcrt tgaacagccg cacctcacgg atgcccagtg tgtcgcgctc     420
caggammgsc accagcgtgt ccaggtcaat gtcggtgaag ccctccgcgg gtratggcgt     480
ctgcagtgtt tttgtcgatg ttctccaggc acaggctggc cagctgcggt tcatcgaaga     540
gtcgcgcctg cgtgagcagc atgaaggcgt tgtcggctcg cagttcttct tcaggaactc     600
cacgcaat                                                              608
```

```
<210> 194
<211> 392
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 194
gaacggctgg accttgcctc gcattgtgct tgctggcagg gaataccttg gcaagcagyt      60
ccagtccgag cagccccaga ccgctgccgc ccgaagctaa gcctgcctct ggccttcccc     120
tccgcctcaa tgcagaacca gtagtgggag cactgtgttt agagttaaga gtgaacactg     180
tttgatttta cttgggaatt tcctctgtta tatagctttt cccaatgcta atttccaaac     240
aacaacaaca aaataacatg tttgcctgtt aagttgtata aaagtaggtg attctgtatt     300
taaagaaaat attactgtta catatactgc ttgcaatttc tgtatttatt gktnctstgg     360
aaataaatat agttattaaa ggttgtcant cc                                   392


<210> 195
<211> 502
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(502)
<223> n = A,T,C or G

<400> 195
ccsttkgagg ggtkaggkyc cagttyccga gtggaagaaa caggccagga gaagtgcgtg      60
ccgagctgag gcagatgttc ccacagtgac ccccagagcc stgggstata gtytctgacc     120
cctcncaagg aaagaccacs ttctggggac atgggctgga gggcaggacc tagaggcacc     180
aagggaaggc cccattccgg ggstgttccc cgaggaggaa gggaaggggc tctgtgtgcc     240
ccccasgagg aagaggccct gagtcctggg atcagacacc ccttcacgtg tatccccaca     300
caaatgcaag ctcaccaagg tcccctctca gtccccttcc stacaccctg amcggccact     360
gscscacacc cacccagagc acgccacccg ccatggggar tgtgctcaag gartcgcngg     420
gcarcgtgga catctngtcc cagaaggggg cagaatctcc aatagangga ctgarcmstt     480
gctnanaaaa aaaaanaaaa aa                                               502


<210> 196
<211> 665
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(665)
<223> n = A,T,C or G

<400> 196
ggttacttgg tttcattgcc accacttagt ggatgtcatt tagaaccatt ttgtctgctc      60
cctctggaag ccttgcgcag agcggacttt gtaattgttg gagaataact gctgaatttt     120
wagctgtttk gagttgatts gcaccactgc acccacaact tcaatatgaa aacyawttga     180
actwatttat tatcttgtga aaagtataac aatgaaaatt ttgttcatac tgtattkatc     240
```

```
aagtatgatg aaaagcaawa gatatatatt cttttattat gttaaattat gattgccatt      300
attaatcggc aaaatgtgga gtgtatgttc ttttcacagt aatatatgcc ttttgtaact      360
tcacttggtt attttattgt aaatgartta caaaattctt aatttaagar aatggtatgt      420
watatttatt tcattaattt ctttcctkgt ttacgtwaat tttgaaaaga wtgcatgatt      480
tcttgacaga aatcgatctt gatgctgtgg aagtagtttg acccacatcc ctatgagttt      540
ttcttagaat gtataaaggt tgtagcccat cnaacttcaa agaaaaaaat gaccacatac      600
tttgcaatca ggctgaaatg tggcatgctn ttctaattcc aactttataa actagcaaan      660
aagtg                                                                  665
```

```
        <210> 197
        <211> 492
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(492)
        <223> n = A,T,C or G

        <400> 197
ttttntttttt ttttttttgc aggaaggatt ccatttattg tggatgcatt ttcacaatat       60
atgtttattg gagcgatcca ttatcagtga aaagtatcaa gtgtttataa nattttagg        120
aaggcagatt cacagaacat gctngtcngc ttgcagtttt acctcgtana gatnacagag       180
aattatagtc naaccagtaa acnaggaatt tactttcaa aagattaaat ccaaactgaa        240
caaaattcta ccctgaaact tactccatcc aaatattgga ataanagtca gcagtgatac       300
attctcttct gaactttaga ttttctagaa aaatatgtaa tagtgatcag gaagagctct       360
tgttcaaaag tacaacnaag caatgttccc ttaccatagg ccttaattca aactttgatc       420
catttcactc ccatcacggg agtcaatgct acctgggaca cttgtatttt gttcatnctg       480
ancntggctt aa                                                          492
```

```
        <210> 198
        <211> 478
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(478)
        <223> n = A,T,C or G

        <400> 198
tttnttttgn atttcantct gtannaanta ttttcattat gtttattana aaaatatnaa        60
tgtntccacn acaaatcatn ttacntnagt aagaggccan ctacattgta caacatacac       120
tgagtatatt ttgaaaagga caagtttaaa gtanacncat attgccganc atancacatt       180
tatacatggc ttgattgata tttagcacag canaaactga gtgagttacc agaaanaaat       240
natatatgtc aatcngattt aagatacaaa acagatccta tggtacatan catcntgtag       300
gagttgtggc tttatgttta ctgaaagtca atgcagttcc tgtacaaaga gatggccgta       360
agcattctag tacctctact ccatggttaa gaatcgtaca cttatgttta catatgtnca       420
gggtaagaat tgtgttaagt naanttatgg agaggtccan gagaaaaatt tgatncaa         478
```

```
        <210> 199
```

```
<211> 482
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(482)
<223> n = A,T,C or G

<400> 199
agtgacttgt cctccaacaa aaccccttga tcaagtttgt ggcactgaca atcagaccta    60
tgctagttcc tgtcatctat tcgctactaa atgcagactg gaggggacca aaaaggggca   120
tcaactccag ctggattatt ttggagcctg caaatctatt cctacttgta cggactttga   180
agtgattcag tttcctctac ggatgagaga ctggctcaag aatatcctca tgcagcttta   240
tgaagccnac tctgaacacg ctggttatct nagatgagaa ncagagaaat aaagtcnaga   300
aaatttacct ggangaaaag aggctttngg ctggggacca tcccattgaa ccttctctta   360
anggacttta agaanaaact accacatgtn tgtngtatcc tggtgccngg ccgtttantg   420
aacntngacn ncacccttnt ggaatanant cttgacngcn tcctgaactt gctcctctgc   480
ga                                                                 482
```

```
<210> 200
<211> 270
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(270)
<223> n = A,T,C or G

<400> 200
cggccgcaag tgcaactcca gctggggccg tgcggacgaa gattctgcca gcagttggtc    60
cgactgcgac gacggcggcg gcgacagtcg caggtgcagc gcgggcgcct ggggtcttgc   120
aaggctgagc tgacgccgca gaggtcgtgt cacgtcccac gaccttgacg ccgtcgggga   180
cagccggaac agagcccggt gaangcggga ggcctcgggg agcccctcgg gaagggcggc   240
ccgagagata cgcaggtgca ggtggccgcc                                   270
```

```
<210> 201
<211> 419
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(419)
<223> n = A,T,C or G

<400> 201
ttttttttt ttttggaatc tactgcgagc acagcaggtc agcaacaagt ttattttgca    60
gctagcaagg taacagggta gggcatggtt acatgttcag gtcaacttcc tttgtcgtgg   120
ttgattggtt tgtctttatg ggggcggggt ggggtagggg aaancgaagc anaantaaca   180
```

```
tggagtgggt gcaccctccc tgtagaacct ggttacnaaa gcttggggca gttcacctgg    240
tctgtgaccg tcattttctt gacatcaatg ttattagaag tcaggatatc ttttagagag    300
tccactgtnt ctggagggag attagggttt cttgccaana tccaancaaa atccacntga    360
aaaagttgga tgatncangt acngaatacc ganggcatan ttctcatant cggtggcca     419
```

```
        <210> 202
        <211> 509
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(509)
        <223> n = A,T,C or G

        <400> 202
tttntttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt     60
tggcacttaa tccattttta tttcaaaatg tctacaaant ttnaatncnc cattatacng    120
gtnattttnc aaaatctaaa nnttattcaa atntnagcca aantccttac ncaaatnnaa    180
tacncncaaa aatcaaaaat atacntntct ttcagcaaac ttngttacat aaattaaaaa    240
aatatatacg gctggtgttt tcaaagtaca attatcttaa cactgcaaac atntttnnaa    300
ggaactaaaa taaaaaaaaa cactnccgca aaggttaaag ggaacaacaa attcntttta    360
caacancnnc nattataaaa atcatatctc aaatcttagg ggaatatata cttcacacng    420
ggatcttaac ttttactnca ctttgtttat tttttttanaa ccattgtntt gggcccaaca    480
caatggnaat nccnccncnc tggactagt                                       509
```

```
        <210> 203
        <211> 583
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(583)
        <223> n = A,T,C or G

        <400> 203
tttttttttt tttttttga cccccctctt ataaaaaaca agttaccatt ttattttact     60
tacacatatt tattttataa ttggtattag atattcaaaa ggcagctttt aaaatcaaac    120
taaatggaaa ctgccttaga tacataattc ttaggaatta gcttaaaatc tgcctaaagt    180
gaaaatcttc tctagctctt ttgactgtaa attttttgact cttgtaaaac atccaaattc    240
attttttcttg tctttaaaat tatctaatct ttccattttt tccctattcc aagtcaattt    300
gcttctctag cctcatttcc tagctcttat ctactattag taagtggctt ttttcctaaa    360
agggaaaaca ggaagagana atggcacaca aaacaaacat tttatattca tatttctacc    420
tacgttaata aaatagcatt ttgtgaagcc agctcaaaag aaggcttaga tccttttatg    480
tccattttag tcactaaacg atatcnaaag tgccagaatg caaaaggttt gtgaacattt    540
attcaaaagc taatataaga tatttcacat actcatcttt ctg                      583
```

```
        <210> 204
        <211> 589
        <212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(589)
<223> n = A,T,C or G

<400> 204

```
ttttttttnt tttttttttt tttttnctc ttcttttttt ttganaatga ggatcgagtt      60
tttcactctc tagatagggc atgaagaaaa ctcatctttc cagctttaaa ataacaatca     120
aatctcttat gctatatcat attttaagtt aaactaatga gtcactggct tatcttctcc     180
tgaaggaaat ctgttcattc ttctcattca tatagttata tcaagtacta ccttgcatat     240
tgagaggttt ttcttctcta tttacacata tatttccatg tgaatttgta tcaaaccttt     300
attttcatgc aaactagaaa ataatgtntt cttttgcata agagaagaga acaatatnag     360
cattacaaaa ctgctcaaat tgtttgttaa gnttatccat tataattagt tnggcaggag     420
ctaatacaaa tcacatttac ngacnagcaa taataaaact gaagtaccag ttaaatatcc     480
aaaataatta aaggaacatt tttagcctgg gtataattag ctaattcact ·ttacaagcat     540
ttattnagaa tgaattcaca tgttattatt ccntagccca acacaatgg                 589
```

<210> 205
<211> 545
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(545)
<223> n = A,T,C or G

<400> 205

```
tttttntttt tttttttcagt aataatcaga acaatattta tttttatatt taaaattcat      60
agaaaagtgc cttacattta ataaagttt gtttctcaaa gtgatcagag gaattagata     120
tngtcttgaa caccaatatt aatttgagga aaatacacca aaatacatta agtaaattat     180
ttaagatcat agagcttgta agtgaaaaga taaaatttga cctcagaaac tctgagcatt     240
aaaaatccac tattagcaaa taaattacta tggacttctt gctttaattt tgtgatgaat     300
atggggtgtc actggtaaac caacacattc tgaaggatac attacttagt gatagattct     360
tatgtacttt gctanatnac gtggatatga gttgacaagt ttctctttct tcaatctttt     420
aaggggcnga ngaaatgagg aagaaaagaa aaggattacg catactgttc tttctatngg     480
aaggattaga tatgtttcct ttgccaatat taaaaaaata ataatgttta ctactagtga     540
aaccc                                                                 545
```

<210> 206
<211> 487
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(487)
<223> n = A,T,C or G

<400> 206

```
tttttttttt tttttagtc aagtttctna tttttattat aattaaagtc ttggtcattt      60
catttattag ctctgcaact tacatattta aattaaagaa acgttnttag acaactgtna     120
caatttataa atgtaaggtg ccattattga gtanatatat tcctccaaga gtggatgtgt     180
cccttctccc accaactaat gaancagcaa cattagttta attttattag tagatnatac     240
actgctgcaa acgctaattc tcttctccat ccccatgtng atattgtgta tatgtgtgag     300
ttggtnagaa tgcatcanca atctnacaat caacagcaag atgaagctag gcntgggctt     360
tcggtgaaaa tagactgtgt ctgtctgaat caaatgatct gacctatcct cggtggcaag     420
aactcttcga accgcttcct caaaggcngc tgccacattt gtggcntctn ttgcacttgt     480
ttcaaaa                                                               487
```

<210> 207
<211> 332
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(332)
<223> n = A,T,C or G

<400> 207

```
tgaattggct aaaagactgc atttttanaa ctagcaactc ttatttcttt cctttaaaaa      60
tacatagcat taaatcccaa atcctattta aagacctgac agcttgagaa ggtcactact     120
gcatttatag gaccttctgg tggttctgct gttacntttg aantctgaca atccttgana     180
atctttgcat gcagaggagg taaaaggtat tggattttca cagaggaana acacagcgca     240
gaaatgaagg ggccaggctt actgagcttg tccactggag ggctcatggg tgggacatgg     300
aaaagaaggc agcctaggcc ctggggagcc ca                                   332
```

<210> 208
<211> 524
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(524)
<223> n = A,T,C or G

<400> 208

```
agggcgtggt gcggagggcg ttactgtttt gtctcagtaa caataaatac aaaaagactg      60
gttgtgttcc ggccccatcc aaccacgaag ttgatttctc ttgtgtgcag agtgactgat     120
tttaaaggac atggagcttg tcacaatgtc acaatgtcac agtgtgaagg gcacactcac     180
tcccgcgtga ttcacattta gcaaccaaca atagctcatg agtccatact tgtaaatact     240
tttggcagaa tacttnttga aacttgcaga tgataactaa gatccaagat atttcccaaa     300
gtaaatagaa gtgggtcata atattaatta cctgttcaca tcagcttcca tttacaagtc     360
atgagcccag acactgacat caaactaagc ccacttagac tcctcaccac cagtctgtcc     420
tgtcatcaga caggaggctg tcaccttgac caaattctca ccagtcaatc atctatccaa     480
aaaccattac ctgatccact tccggtaatg caccaccttg gtga                      524
```

<210> 209

```
<211> 159
<212> DNA
<213> Homo sapien

<400> 209
gggtgaggaa atccagagtt gccatggaga aaattccagt gtcagcattc ttgctccttg      60
tggccctctc ctacactctg gccagagata ccacagtcaa acctggagcc aaaaaggaca     120
caaaggactc tcgacccaaa ctgccccaga ccctctcca                            159


<210> 210
<211> 256
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(256)
<223> n = A,T,C or G

<400> 210
actccctggc agacaaaggc agaggagaga gctctgttag ttctgtgttg ttgaactgcc      60
actgaatttc tttccacttg gactattaca tgccanttga gggactaatg gaaaaacgta     120
tggggagatt ttanccaatt tangtntgta aatggggaga ctggggcagg cgggagagat     180
ttgcagggtg naaatgggan ggctggtttg ttanatgaac agggacatag gaggtaggca     240
ccaggatgct aaatca                                                     256


<210> 211
<211> 264
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(264)
<223> n = A,T,C or G

<400> 211
acattgtttt tttgagataa agcattgaga gagctctcct taacgtgaca caatggaagg      60
actggaacac atacccacat ctttgttctg agggataatt ttctgataaa gtcttgctgt     120
atattcaagc acatatgtta tatattattc agttccatgt ttatagccta gttaaggaga     180
ggggagatac attcngaaag aggactgaaa gaaatactca agtnggaaaa cagaaaaaga     240
aaaaaggag caaatgagaa gcct                                             264


<210> 212
<211> 328
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(328)
```

<223> n = A,T,C or G

<400> 212
```
acccaaaaat ccaatgctga atatttggct tcattattcc canattcttt gattgtcaaa        60
ggatttaatg ttgtctcagc ttgggcactt cagttaggac ctaaggatgc cagccggcag       120
gtttatatat gcagcaacaa tattcaagcg cgacaacagg ttattgaact tgcccgccag       180
ttnaatttca ttcccattga cttgggatcc ttatcatcag ccagagagat tgaaaattta       240
cccctacnac tctttactct ctgganaggg ccagtggtgg tagctataag cttggccaca       300
ttttttttc ctttattcct ttgtcaga                                           328
```

<210> 213
<211> 250
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A,T,C or G

<400> 213
```
acttatgagc agagcgacat atccnagtgt agactgaata aaactgaatt ctctccagtt        60
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct       120
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt       180
ttcaatattt gcatgaacct gctgataanc catgttaana aacaaatatc tctctnacct       240
tctcatcggt                                                              250
```

<210> 214
<211> 444
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(444)
<223> n = A,T,C or G

<400> 214
```
acccagaatc caatgctgaa tatttggctt cattattccc agattctttg attgtcaaag        60
gatttaatgt tgtctcagct tgggcacttc agttaggacc taaggatgcc agccggcagg       120
tttatatatg cagcaacaat attcaagcgc gacaacaggt tattgaactt gcccgccagt       180
tgaatttcat tcccattgac ttgggatcct tatcatcagc canagagatt gaaaatttac       240
ccctacgact ctttactctc tggagagggc cagtggtggt agctataagc ttggccacat       300
tttttttcc tttattcctt tgtcagagat gcgattcatc catatgctan aaaccaacag       360
agtgactttt acaaaattcc tataganatt gtgaataaaa ccttacctat agttgccatt       420
actttgctct ccctaatata cctc                                              444
```

<210> 215
<211> 366
<212> DNA
<213> Homo sapien

```
<220>
<221> misc_feature
<222> (1)...(366)
<223> n = A,T,C or G

<400> 215
acttatgagc agagcgacat atccaagtgt anactgaata aaactgaatt ctctccagtt      60
taaagcattg ctcactgaag ggatagaagt gactgccagg agggaaagta agccaaggct     120
cattatgcca aagganatat acatttcaat tctccaaact tcttcctcat tccaagagtt     180
ttcaatattt gcatgaacct gctgataagc catgttgaga aacaaatatc tctctgacct     240
tctcatcggt aagcagaggc tgtaggcaac atggaccata gcgaanaaaa aacttagtaa     300
tccaagctgt tttctacact gtaaccaggt ttccaaccaa ggtggaaatc tcctatactt     360
ggtgcc                                                                366


<210> 216
<211> 260
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(260)
<223> n = A,T,C or G

<400> 216
ctgtataaac agaactccac tgcangaggg agggccgggc caggagaatc tccgcttgtc      60
caagacaggg gcctaaggag ggtctccaca ctgctnntaa gggctnttnc atttttttat     120
taataaaaag tnnaaaaggc ctcttctcaa cttttttccc ttnggctgga aaatttaaaa     180
atcaaaaatt tcctnaagtt ntcaagctat catatatact ntatcctgaa aaagcaacat     240
aattcttcct tccctccttt                                                 260


<210> 217
<211> 262
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(262)
<223> n = A,T,C or G

<400> 217
acctacgtgg gtaagtttan aaatgttata atttcaggaa naggaacgca tataattgta      60
tcttgcctat aattttctat tttaataagg aaatagcaaa ttggggtggg gggaatgtag     120
ggcattctac agtttgagca aaatgcaatt aaatgtggaa ggacagcact gaaaaatttt     180
atgaataatc tgtatgatta tatgtctcta gagtagattt ataattagcc acttacccta     240
atatccttca tgcttgtaaa gt                                               262


<210> 218
<211> 205
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(205)
<223> n = A,T,C or G

<400> 218
accaaggtgg tgcattaccg gaantggatc aangacacca tcgtggccaa cccctgagca      60
cccctatcaa ctcccttttg tagtaaactt ggaaccttgg aaatgaccag gccaagactc     120
aggcctcccc agttctactg acctttgtcc ttangtntna ngtccagggt tgctaggaaa     180
anaaatcagc agacacaggt gtaaa                                            205

<210> 219
<211> 114
<212> DNA
<213> Homo sapien

<400> 219
tactgttttg tctcagtaac aataaataca aaaagactgg ttgtgttccg gccccatcca      60
accacgaagt tgatttctct tgtgtgcaga gtgactgatt ttaaaggaca tgga           114

<210> 220
<211> 93
<212> DNA
<213> Homo sapien

<400> 220
actagccagc acaaaaggca gggtagcctg aattgctttc tgctctttac atttctttta      60
aaataagcat ttagtgctca gtccctactg agt                                  93

<210> 221
<211> 167
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(167)
<223> n = A,T,C or G

<400> 221
actangtgca ggtgcgcaca aatatttgtc gatattccct tcatcttgga ttccatgagg      60
tcttttgccc agcctgtggc tctactgtag taagtttctg ctgatgagga gccagnatgc     120
cccccactac cttccctgac gctccccana aatcacccaa cctctgt                   167

<210> 222
<211> 351
<212> DNA
<213> Homo sapien
```

<400> 222

```
agggcgtggt gcggagggcg gtactgacct cattagtagg aggatgcatt ctggcacccc      60
gttcttcacc tgtcccccaa tccttaaaag gccatactgc ataaagtcaa caacagataa     120
atgtttgctg aattaaagga tggatgaaaa aaattaataa tgaatttttg cataatccaa     180
ttttctcttt tatatttcta gaagaagttt ctttgagcct attagatccc gggaatcttt     240
taggtgagca tgattagaga gcttgtaggt tgcttttaca tatatctggc atatttgagt     300
ctcgtatcaa aacaatagat tggtaaaggt ggtattattg tattgataag t             351
```

<210> 223
<211> 383
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(383)
<223> n = A,T,C or G

<400> 223

```
aaaacaaaca aacaaaaaaa acaattcttc attcagaaaa attatcttag ggactgatat      60
tggtaattat ggtcaattta atwrtrttkt ggggcatttc cttacattgt cttgacaaga     120
ttaaaatgtc tgtgccaaaa ttttgtattt tatttggaga cttcttatca aaagtaatgc     180
tgccaaagga agtctaagga attagtagtg ttcccmtcac ttgtttggag tgtgctattc     240
taaaagattt tgatttcctg gaatgacaat tatattttaa ctttggtggg ggaaanagtt     300
ataggaccac agtcttcact tctgatactt gtaaattaat cttttattgc acttgttttg     360
accattaagc tatatgttta aaa                                             383
```

<210> 224
<211> 320
<212> DNA
<213> Homo sapien

<400> 224

```
cccctgaagg cttcttgtta gaaaatagta cagttacaac caataggaac aacaaaaaga      60
aaaagtttgt gacattgtag tagggagtgt gtacccctta ctccccatca aaaaaaaaat     120
ggatacatgg ttaaaggata raagggcaat attttatcat atgttctaaa agagaaggaa     180
gagaaaatac tactttctcr aaatggaagc ccttaaaggt gctttgatac tgaaggacac     240
aaatgtggcc gtccatcctc ctttaragtt gcatgacttg gacacggtaa ctgttgcagt     300
tttaractcm gcattgtgac                                                 320
```

<210> 225
<211> 1214
<212> DNA
<213> Homo sapien

<400> 225

```
gaggactgca gcccgcactc gcagccctgg caggcggcac tggtcatgga aaacgaattg      60
ttctgctcgg gcgtcctggt gcatccgcag tgggtgctgt cagccgcaca ctgtttccag     120
aactcctaca ccatcgggct gggcctgcac agtcttgagg ccgaccaaga gccaggagc      180
cagatggtgg aggccagcct ctccgtacgg cacccagagt acaacagacc cttgctcgct     240
```

```
aacgacctca tgctcatcaa gttggacgaa tccgtgtccg agtctgacac catccggagc       300
atcagcattg cttcgcagtg ccctaccgcg gggaactctt gcctcgtttc tggctggggt       360
ctgctggcga acggcagaat gcctaccgtg ctgcagtgcg tgaacgtgtc ggtggtgtct       420
gaggaggtct gcagtaagct ctatgacccg ctgtaccacc ccagcatgtt ctgcgccggc       480
ggagggcaag accagaagga ctcctgcaac ggtgactctg gggggcccct gatctgcaac       540
gggtacttgc agggccttgt gtctttcgga aaagccccgt gtggccaagt tggcgtgcca       600
ggtgtctaca ccaacctctg caaattcact gagtggatag agaaaaccgt ccaggccagt       660
taactctggg gactgggaac ccatgaaatt gacccccaaa tacatcctgc ggaaggaatt       720
caggaatatc tgttcccagc ccctcctccc tcaggcccag gagtccaggc ccccagcccc       780
tcctccctca aaccaagggt acagatcccc agcccctcct ccctcagacc caggagtcca       840
gaccccccag cccctcctcc ctcagaccca ggagtccagc ccctcctccc tcagacccag       900
gagtccagac cccccagccc ctcctccctc agacccaggg tccaggccc  ccaacccctc       960
ctccctcaga ctcagaggtc caagccccca accctccctt ccccagaccc agaggtccag      1020
gtcccagccc ctcctccctc agacccagcg gtccaatgcc acctagactc tccctgtaca      1080
cagtgccccc ttgtggcacg ttgacccaac cttaccagtt ggttttcat  tttttgtccc      1140
tttcccctag atccagaaat aaagtctaag agaagcgcaa aaaaaaaaa  aaaaaaaaaa      1200
aaaaaaaaaa aaaa                                                        1214
```

```
        <210> 226
        <211> 119
        <212> DNA
        <213> Homo sapien


        <400> 226
acccagtatg tgcagggaga cggaacccca tgtgacagcc cactccacca gggttcccaa        60
agaacctggc ccagtcataa tcattcatcc tgacagtggc aataatcacg ataaccagt        119


        <210> 227
        <211> 818
        <212> DNA
        <213> Homo sapien


        <400> 227
acaattcata gggacgacca atgaggacag ggaatgaacc cggctctccc ccagccctga        60
tttttgctac atatggggtc cctttcatt ctttgcaaaa acactgggtt ttctgagaac        120
acggacggtt cttagcacaa tttgtgaaat ctgtgtaraa ccgggctttg caggggagat        180
aattttcctc ctctggagga aaggtggtga ttgacaggca gggagacagt gacaaggcta        240
gagaaagcca cgctcggcct tctctgaacc aggatggaac ggcagacccc tgaaaacgaa        300
gcttgtcccc ttccaatcag ccacttctga gaaccccat  ctaacttcct actggaaaag        360
agggcctcct caggagcagt ccaagagttt tcaaagataa cgtgacaact accatctaga        420
ggaaagggtg caccctcagc agagaagccg agagcttaac tctggtcgtt ccagagaca        480
acctgctggc tgtcttggga tgcgcccagc ctttgagagg ccactacccc atgaacttct        540
gccatccact ggacatgaag ctgaggacac tgggcttcaa cactgagttg tcatgagagg        600
gacaggctct gccctcaagc cggctgaggg cagcaaccac tctcctcccc tttctcacgc        660
aaagccattc ccacaaatcc agaccatacc atgaagcaac gagacccaaa cagtttggct        720
caagaggata tgaggactgt ctcagcctgg ctttgggctg acaccatgca cacacacaag        780
gtccacttct aggttttcag cctagatggg agtcgtgt                               818
```

```
        <210> 228
        <211> 744
        <212> DNA
```

<213> Homo sapien

<400> 228
```
actggagaca ctgttgaact tgatcaagac ccagaccacc ccaggtctcc ttcgtgggat        60
gtcatgacgt ttgacatacc tttggaacga gcctcctcct tggaagatgg aagaccgtgt       120
tcgtggccga cctggcctct cctggcctgt ttcttaagat gcggagtcac atttcaatgg       180
taggaaaagt ggcttcgtaa aatagaagag cagtcactgt ggaactacca aatggcgaga       240
tgctcggtgc acattggggt gctttgggat aaaagattta tgagccaact attctctggc       300
accagattct aggccagttt gttccactga agcttttccc acagcagtcc acctctgcag       360
gctggcagct gaatggcttg ccggtggctc tgtggcaaga tcacactgag atcgatgggt       420
gagaaggcta ggatgcttgt ctagtgttct tagctgtcac gttggctcct tccaggttgg       480
ccagacggtg ttggccactc ccttctaaaa cacaggcgcc ctcctggtga cagtgacccg       540
ccgtggtatg ccttggccca ttccagcagt cccagttatg catttcaagt ttggggtttg       600
ttcttttcgt taatgttcct ctgtgttgtc agctgtcttc atttcctggg ctaagcagca       660
ttgggagatg tggaccagag atccactcct taagaaccag tggcgaaaga cactttcttt       720
cttcactctg aagtagctgg tggt                                             744
```

<210> 229
<211> 300
<212> DNA
<213> Homo sapien

<400> 229
```
cgagtctggg ttttgtctat aaagtttgat ccctcctttt ctcatccaaa tcatgtgaac        60
cattacacat cgaaataaaa gaaaggtggc agacttgccc aacgccaggc tgacatgtgc       120
tgcagggttg ttgttttttta attattattg ttagaaacgt cacccacagt ccctgttaat       180
ttgtatgtga cagccaactc tgagaaggtc ctattttcc acctgcagag gatccagtct       240
cactaggctc ctccttgccc tcacactgga gtctccgcca gtgtgggtgc ccactgacat       300
```

<210> 230
<211> 301
<212> DNA
<213> Homo sapien

<400> 230
```
cagcagaaca aatacaaata tgaagagtgc aaagatctca taaaatctat gctgaggaat        60
gagcgacagt tcaaggagga gaagcttgca gagcagctca agcaagctga ggagctcagg       120
caatataaag tcctggttca cactcaggaa cgagagctga cccagttaag ggagaagttg       180
cgggaaggga gagatgcctc cctctcattg aatgagcatc tccaggccct cctcactccg       240
gatgaaccgg acaagtccca ggggcaggac ctccaagaaa cagacctcgg ccgcgaccac       300
g                                                                      301
```

<210> 231
<211> 301
<212> DNA
<213> Homo sapien

<400> 231
```
gcaagcacgc tggcaaatct ctgtcaggtc agctccagag aagccattag tcattttagc        60
caggaactcc aagtccacat ccttggcaac tggggacttg cgcaggttag ccttgaggat       120
ggcaacacgg gacttctcat caggaagtgg gatgtagatg agctgatcaa gacggccagg       180
```

```
tctgaggatg gcaggatcaa tgatgtcagg ccggttggta ccgccaatga tgaacacatt      240
tttttttgtg gacatgccat ccatttctgt caggatctgg ttgatgactc ggtcagcagc      300
c                                                                        301
```

```
        <210> 232
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 232
agtaggtatt tcgtgagaag ttcaacacca aaactggaac atagttctcc ttcaagtgtt       60
ggcgacagcg gggcttcctg attctggaat ataactttgt gtaaattaac agccacctat      120
agaagagtcc atctgctgtg aaggagagac agagaactct gggttccgtc gtcctgtcca      180
cgtgctgtac caagtgctgg tgccagcctg ttacctgttc tcactgaaaa tctggctaat      240
gctcttgtgt atcacttctg attctgacaa tcaatcaatc aatggcctag agcactgact      300
g                                                                        301
```

```
        <210> 233
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 233
atgactgact tcccagtaag gctctctaag gggtaagtag gaggatccac aggatttgag       60
atgctaaggc cccagagatc gtttgatcca accctcttat tttcagaggg gaaaatgggg      120
cctagaagtt acagagcatc tagctggtgc gctggcaccc ctggcctcac acagactccc      180
gagtagctgg gactacaggc acacagtcac tgaagcaggc cctgttagca attctatgcg      240
tacaaattaa catgagatga gtagagactt tattgagaaa gcaagagaaa atcctatcaa      300
c                                                                        301
```

```
        <210> 234
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 234
aggtcctaca catcgagact catccatgat tgatatgaat ttaaaaatta caagcaaaga       60
cattttattc atcatgatgc tttcttttgt ttcttctttt cgttttcttc tttttctttt      120
tcaatttcag caacatactt ctcaatttct tcaggattta aaatcttgag ggattgatct      180
cgcctcatga cagcaagttc aatgtttttg ccacctgact gaaccacttc caggagtgcc      240
ttgatcacca gcttaatggt cagatcatct gcttcaatgg cttcgtcagt atagttcttc      300
t                                                                        301
```

```
        <210> 235
        <211> 283
        <212> DNA
        <213> Homo sapien

        <400> 235
tggggctgtg catcaggcgg gtttgagaaa tattcaattc tcagcagaag ccagaatttg       60
aattccctca tcttttaggg aatcatttac caggtttgga gaggattcag acagctcagg      120
```

```
tgctttcact aatgtctctg aacttctgtc cctctttgtt catggatagt ccaataaata      180
atgttatctt tgaactgatg ctcataggag agaatataag aactctgagt gatatcaaca      240
ttagggattc aaagaaatat tagatttaag ctcacactgg tca                        283


        <210> 236
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 236
aggtcctcca ccaactgcct gaagcacggt taaaattggg aagaagtata gtgcagcata       60
aatactttta aatcgatcag atttccctaa cccacatgca atcttcttca ccagaagagg      120
tcggagcagc atcattaata ccaagcagaa tgcgtaatag ataaatacaa tggtatatag      180
tgggtagacg gcttcatgag tacagtgtac tgtggtatcg taatctggac ttgggttgta      240
aagcatcgtg taccagtcag aaagcatcaa tactcgacat gaacgaatat aaagaacacc      300
a                                                                      301


        <210> 237
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 237
cagtggtagt ggtggtggac gtggcgttgg tcgtggtgcc ttttttggtg cccgtcacaa       60
actcaatttt tgttcgctcc tttttggcct tttccaattt gtccatctca attttctggg      120
ccttggctaa tgcctcatag taggagtcct cagaccagcc atggggatca aacatatcct      180
ttgggtagtt ggtgccaagc tcgtcaatgg cacagaatgg atcagcttct cgtaaatcta      240
gggttccgaa attctttctt cctttggata atgtagttca tatccattcc ctcctttatc      300
t                                                                      301


        <210> 238
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 238
gggcaggttt tttttttttt tttttgatg gtgcagaccc ttgctttatt tgtctgactt       60
gttcacagtt cagccccctg ctcagaaaac caacgggcca gctaaggaga ggaggaggca      120
ccttgagact tccggagtcg aggctctcca gggttcccca gcccatcaat catttttctgc     180
accccctgcc tgggaagcag ctccctgggg ggtgggaatg ggtgactaga agggatttca      240
gtgtgggacc cagggtctgt tcttcacagt aggaggtgga agggatgact aatttctttta     300
t                                                                      301


        <210> 239
        <211> 239
        <212> DNA
        <213> Homo sapien


        <400> 239
ataagcagct agggaattct ttatttagta atgtcctaac ataaaagttc acataactgc       60
ttctgtcaaa ccatgatact gagctttgtg acaacccaga ataactaag agaaggcaaa       120
```

```
cataatacct tagagatcaa gaaacattta cacagttcaa ctgtttaaaa atagctcaac      180
attcagccag tgagtagagt gtgaatgcca gcatacacag tatacaggtc cttcaggga       239


        <210> 240
        <211> 300
        <212> DNA
        <213> Homo sapien


        <400> 240
ggtcctaatg aagcagcagc ttccacattt taacgcaggt ttacggtgat actgtccttt       60
gggatctgcc ctccagtgga accttttaag gaagaagtgg gcccaagcta agttccacat      120
gctgggtgag ccagatgact tctgttccct ggtcactttc ttcaatgggg cgaatggggg      180
ctgccaggtt tttaaaatca tgcttcatct tgaagcacac ggtcacttca ccctcctcac      240
gctgtgggtg tactttgatg aaaatacccca ctttgttggc ctttctgaag ctataatgtc     300


        <210> 241
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 241
gaggtctggt gctgaggtct ctgggctagg aagaggagtt ctgtggagct ggaagccaga       60
cctctttgga ggaaactcca gcagctatgt tggtgtctct gagggaatgc aacaaggctg      120
ctcctccatg tattggaaaa ctgcaaactg gactcaactg gaaggaagtg ctgctgccag      180
tgtgaagaac cagcctgagg tgacagaaac ggaagcaaac aggaacagcc agtcttttct      240
tcctcctcct gtcatacggt ctctctcaag catcctttgt tgtcaggggc ctaaaaggga      300
g                                                                       301


        <210> 242
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 242
ccgaggtcct gggatgcaac caatcactct gtttcacgtg acttttatca ccatacaatt       60
tgtggcattt cctcattttc tacattgtag aatcaagagt gtaaataaat gtatatcgat      120
gtcttcaaga atatatcatt cctttttcac tagaacccat tcaaaatata agtcaagaat      180
cttaatatca acaaatatat caagcaaact ggaaggcaga ataactacca taatttagta      240
taagtaccca aagttttata aatcaaaagc cctaatgata accatttta gaattcaatc       300
a                                                                       301


        <210> 243
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 243
aggtaagtcc cagtttgaag ctcaaaagat ctggtatgag cataggctca tcgacgacat       60
ggtggcccaa gctatgaaat cagagggagg cttcatctgg gcctgtaaaa actatgatgg      120
tgacgtgcag tcggactctg tggcccaagg gtatggctct ctcggcatga tgaccagcgt      180
gctggtttgt ccagatggca agacagtaga agcagaggct gcccacggga ctgtaacccg      240
```

```
tcactaccgc atgttccaga aaggacagga gacgtccacc aatcccattg cttccatttt      300
t                                                                      301
```

```
        <210> 244
        <211> 300
        <212> DNA
        <213> Homo sapien


        <400> 244
gctggtttgc aagaatgaaa tgaatgattc tacagctagg acttaacctt gaaatggaaa       60
gtcatgcaat cccatttgca ggatctgtct gtgcacatgc ctctgtagag agcagcattc      120
ccagggacct tggaaacagt tgacactgta aggtgcttgc tccccaagac acatcctaaa      180
aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc ccttcttatt tatgtgaaca      240
actgtttgtc ttttgtgtat cttttttaaa ctgtaaagtt caattgtgaa aatgaatatc      300
```

```
        <210> 245
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 245
gtctgagtat ttaaaatgtt attgaaatta tccccaacca atgttagaaa agaaagaggt       60.
tatatactta gataaaaaat gaggtgaatt actatccatt gaaatcatgc tcttagaatt      120
aaggccagga gatattgtca ttaatgtara cttcaggaca ctagagtata gcagccctat      180
gttttcaaag agcagagatg caattaaata ttgtttagca tcaaaaaggc cactcaatac      240
agctaataaa atgaaagacc taatttctaa agcaattctt tataatttac aaagttttaa      300
g                                                                      301
```

```
        <210> 246
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 246
ggtctgtcct acaatgcctg cttcttgaaa gaagtcggca ctttctagaa tagctaaata       60
acctgggctt attttaaaga actatttgta gctcagattg gttttcctat ggctaaaata      120
agtgcttctt gtgaaaatta aataaaacag ttaattcaaa gccttgatat atgttaccac      180
taacaatcat actaaatata ttttgaagta caaagtttga catgctctaa agtgacaacc      240
caaatgtgtc ttacaaaaca cgttcctaac aaggtatgct ttacactacc aatgcagaaa      300
c                                                                      301
```

```
        <210> 247
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 247
aggtcctttg gcagggctca tggatcagag ctcaaactgg agggaaaggc atttcgggta       60
gcctaagagg gcgactggcg gcagcacaac caaggaaggc aaggttgttt cccccacgct      120
gtgtcctgtg ttcaggtgcg acacacaatc ctcatgggaa caggatcacc catgcgctgc      180
ccttgatgat caaggttggg gcttaagtgg attaagggag gcaagttctg ggttccttgc      240
```

```
cttttcaaac catgaagtca ggctctgtat ccctcctttt cctaactgat attctaacta    300
a                                                                    301
```

```
        <210> 248
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 248
aggtccttgg agatgccatt tcagccgaag gactcttctw ttcggaagta caccctcact     60
attaggaaga ttcttagggg taatttttct gaggaaggag aactagccaa cttaagaatt    120
acaggaagaa agtggtttgg aagacagcca agaaataaa agcagattaa attgtatcag     180
gtacattcca gcctgttggc aactccataa aaacatttca gattttaatc ccgaatttag    240
ctaatgagac tggatttttg ttttttatgt tgtgtgtcgc agagctaaaa actcagttcc    300
c                                                                    301
```

```
        <210> 249
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 249
gtccagagga agcacctggt gctgaactag gcttgccctg ctgtgaactt gcacttggag     60
ccctgacgct gctgttctcc ccgaaaaacc cgaccgacct ccgcgatctc cgtcccgccc    120
ccagggagac acagcagtga ctcagagctg gtcgcacact gtgcctccct cctcaccgcc    180
catcgtaatg aattattttg aaaattaatt ccaccatcct ttcagattct ggatggaaag    240
actgaatctt tgactcagaa ttgtttgctg aaaagaatga tgtgactttc ttagtcattt    300
a                                                                    301
```

```
        <210> 250
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 250
ggtctgtgac aaggacttgc aggctgtggg aggcaagtga cccttaacac tacacttctc     60
cttatcttta ttggcttgat aaacataatt atttctaaca ctagcttatt tccagttgcc    120
cataagcaca tcagtacttt tctctggctg gaatagtaaa ctaaagtatg gtacatctac    180
ctaaaagact actatgtgga ataatacata ctaatgaagt attacatgat ttaaagacta    240
caataaaacc aaacatgctt ataacattaa gaaaaacaat aaagatacat gattgaaacc    300
a                                                                    301
```

```
        <210> 251
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 251
gccgaggtcc tacatttggc ccagtttccc cctgcatcct ctccagggcc cctgcctcat     60
agacaacctc atagagcata ggagaactgg ttgccctggg ggcaggggga ctgtctggat    120
ggcaggggtc ctcaaaaatg ccactgtcac tgccaggaaa tgcttctgag cagtacacct    180
```

```
cattgggatc aatgaaaagc ttcaagaaat cttcaggctc actctcttga aggcccggaa    240
cctctggagg ggggcagtgg aatcccagct ccaggacgga tcctgtcgaa aagatatcct    300
c                                                                    301


        <210> 252
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 252
gcaaccaatc actctgtttc acgtgacttt tatcaccata caatttgtgg catttcctca     60
ttttctacat tgtagaatca agagtgtaaa taaatgtata tcgatgtctt caagaatata    120
tcattccttt ttcactagga acccattcaa aatataagtc aagaatctta atatcaacaa    180
atatatcaag caaactggaa ggcagaataa ctaccataat ttagtataag tacccaaagt    240
tttataaatc aaaagcccta atgataacca tttttagaat tcaatcatca ctgtagaatc    300
a                                                                    301


        <210> 253
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 253
ttccctaaga agatgttatt ttgttgggtt ttgttccccc tccatctcga ttctcgtacc     60
caactaaaaa aaaaaaataa agaaaaaatg tgctgcgttc tgaaaaataa ctccttagct    120
tggtctgatt gttttcagac cttaaaatat aaacttgttt cacaagcttt aatccatgtg    180
gatttttttt cttagagaac cacaaaacat aaaaggagca agtcggactg aatacctgtt    240
tccatagtgc ccacagggta ttcctcacat tttctccata ggaaaatgct ttttcccaag    300
g                                                                    301


        <210> 254
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 254
cgctgcgcct ttcccttggg ggaggggcaa ggccagaggg ggtccaagtg cagcacgagg     60
aacttgacca attcccttga agcgggtggg ttaaaccctg taaatgggaa caaaatcccc    120
ccaaatctct tcatcttacc ctggtggact cctgactgta gaattttttg gttgaaacaa    180
gaaaaaaata aagctttgga cttttcaagg ttgcttaaca ggtactgaaa gactggcctc    240
acttaaactg agccaggaaa agctgcagat ttattaatgg gtgtgttagt gtgcagtgcc    300
t                                                                    301


        <210> 255
        <211> 302
        <212> DNA
        <213> Homo sapien


        <400> 255
agctttttttt tttttttttt tttttttttt ttcattaaaa aatagtgctc tttattataa     60
attactgaaa tgtttctttt ctgaatataa atataaatat gtgcaaagtt tgacttggat    120
```

```
tgggattttg ttgagttctt caagcatctc ctaataccct caagggcctg agtagggggg      180
aggaaaaagg actggaggtg gaatctttat aaaaaacaag agtgattgag gcagattgta      240
aacattatta aaaaacaaga aacaaacaaa aaaatagaga aaaaaaccac cccaacacac      300
aa                                                                     302
```

```
        <210> 256
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 256
gttccagaaa acattgaagg tggcttccca aagtctaact agggataccc cctctagcct       60
aggaccctcc tccccacacc tcaatccacc aaaccatcca taatgcaccc agataggccc      120
acccccaaaa gcctggacac cttgagcaca cagttatgac caggacagac tcatctctat      180
aggcaaatag ctgctggcaa actggcatta cctggtttgt ggggatgggg gggcaagtgt      240
gtggcctctc ggcctggtta gcaagaacat tcagggtagg cctaagttan tcgtgttagt      300
t                                                                      301
```

```
        <210> 257
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 257
gttgtggagg aactctggct tgctcattaa gtcctactga ttttcactat cccctgaatt       60
tccccactta tttttgtctt tcactatcgc aggccttaga agaggtctac ctgcctccag      120
tcttacctag tccagtctac cccctggagt tagaatggcc atcctgaagt gaaaagtaat      180
gtcacattac tcccttcagt gatttcttgt agaagtgcca atccctgaat gccaccaaga      240
tcttaatctt cacatcttta atcttatctc tttgactcct ctttacaccg gagaaggctc      300
c        .                                                             301
```

```
        <210> 258
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 258
cagcagtagt agatgccgta tgccagcacg cccagcactc ccaggatcag caccagcacc       60
aggggcccag ccaccaggcg cagaagcaag ataaacagta ggctcaagac cagagccacc      120
cccagggcaa caagaatcca ataccaggac tggcaaaat cttcaaagat cttaacactg       180
atgtctcggg cattgaggct gtcaataana cgctgatccc ctgctgtatg gtggtgtcat      240
```

```
tggtgatccc tgggagcgcc ggtggagtaa cgttggtcca tggaaagcag cgcccacaac      300
t                                                                       301
```

```
        <210> 259
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 259
tcatatatgc aaacaaatgc agactangcc tcaggcagag actaaaggac atctcttggg       60
gtgtcctgaa gtgatttgga cccctgaggg cagacaccta agtaggaatc ccagtgggaa      120
gcaaagccat aaggaagccc aggattcctt gtgatcagga agtgggccag gaaggtctgt      180
tccagctcac atctcatctg catgcagcac ggaccggatg cgcccactgg gtcttggctt      240
ccctcccatc ttctcaagca gtgtccttgt tgagccattt gcatccttgg ctccaggtgg      300
c                                                                       301
```

```
        <210> 260
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 260
ttttttttct ccctaaggaa aaagaaggaa caagtctcat aaaaccaaat aagcaatggt       60
aaggtgtctt aacttgaaaa agattaggag tcactggttt acaagttata attgaatgaa      120
agaactgtaa cagccacagt tggccatttc atgccaatgg cagcaaacaa caggattaac      180
tagggcaaaa taaataagtg tgtggaagcc ctgataagtg cttaataaac agactgattc      240
actgagacat cagtacctgc ccgggcggcc gctcgagccg aattctgcag atatccatca      300
c                                                                       301
```

```
        <210> 261
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 261
aaatattcga gcaaatcctg taactaatgt gtctccataa aaggctttga actcagtgaa       60
tctgcttcca tccacgattc tagcaatgac ctctcggaca tcaaagctcc tcttaaggtt      120
agcaccaact attccataca attcatcagc aggaaataaa ggctcttcag aaggttcaat      180
ggtgacatcc aatttcttct gataatttag attcctcaca accttcctag ttaagtgaag      240
ggcatgatga tcatccaaag cccagtggtc acttactcca gactttctgc aatgaagatc      300
a                                                                       301
```

```
        <210> 262
        <211> 301
        <212> DNA
        <213> Homo sapien
```

```
          <400> 262
gaggagagcc tgttacagca tttgtaagca cagaatactc caggagtatt tgtaattgtc      60
tgtgagcttc ttgccgcaag tctctcagaa atttaaaaag atgcaaatcc ctgagtcacc     120
cctagacttc ctaaaccaga tcctctgggg ctggaacctg gcactctgca tttgtaatga     180
gggctttctg gtgcacacct aattttgtgc atctttgccc taaatcctgg attagtgccc     240
catcattacc cccacattat aatgggatag attcagagca gatactctcc agcaaagaat     300
c                                                                     301


          <210> 263
          <211> 301
          <212> DNA
          <213> Homo sapien

          <220>
          <221> misc_feature
          <222> (1)...(301)
          <223> n = A,T,C or G

          <400> 263
tttagcttgt ggtaaatgac tcacaaaact gattttaaaa tcaagttaat gtgaattttg      60
aaaattacta cttaatccta attcacaata acaatggcat taaggtttga cttgagttgg     120
ttcttagtat tatttatggt aaataggctc ttaccacttg caaataactg gccacatcat     180
taatgactga cttcccagta aggctctcta aggggtaagt angaggatcc acaggatttg     240
agatgctaag gccccagaga tcgtttgatc caaccctctt attttcagag gggaaaatgg     300
g                                                                     301


          <210> 264
          <211> 301
          <212> DNA
          <213> Homo sapien

          <400> 264
aaagacgtta aaccactcta ctaccacttg tggaactctc aaagggtaaa tgacaaascc      60
aatgaatgac tctaaaaaca atatttacat ttaatggttt gtagacaata aaaaaacaag     120
gtggatagat ctagaattgt aacattttaa gaaaaccata scatttgaca gatgagaaag     180
ctcaattata gatgcaaagt tataactaaa ctactatagt agtaaagaaa tacatttcac     240
acccttcata taaattcact atcttggctt gaggcactcc ataaaatgta tcacgtgcat     300
a                                                                     301


          <210> 265
          <211> 301
          <212> DNA
          <213> Homo sapien

          <400> 265
tgcccaagtt atgtgtaagt gtatccgcac ccagaggtaa aactacactg tcatctttgt      60
cttcttgtga cgcagtattt cttctctggg gagaagccgg gaagtcttct cctggctcta     120
catattcttg gaagtctcta atcaactttt gttccatttg tttcatttct tcaggaggga     180
ttttcagttt gtcaacatgt tctctaacaa cacttgccca tttctgtaaa gaatccaaag     240
cagtccaagg ctttgacatg tcaacaacca gcataactag agtatccttc agagatacgg     300
```

c   301

```
        <210> 266
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 266
taccgtctgc ccttcctccc atccaggcca tctgcgaatc tacatgggtc ctcctattcg      60
acaccagatc actctttcct ctacccacag gcttgctatg agcaagagac acaacctcct     120
ctcttctgtg ttccagcttc ttttcctgtt cttcccaccc cttaagttct attcctgggg     180
atagagacac caatacccat aacctctctc ctaagcctcc ttataaccca gggtgcacag     240
cacagactcc tgacaactgg taaggccaat gaactgggag ctcacagctg gctgtgcctg     300
a                                                                    301

        <210> 267
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 267
aaagagcaca ggccagctca gcctgccctg gccatctaga ctcagcctgg ctccatgggg      60
gttctcagtg ctgagtccat ccaggaaaag ctcacctaga ccttctgagg ctgaatcttc     120
atcctcacag gcagcttctg agagcctgat attcctagcc ttgatggtct ggagtaaagc     180
ctcattctga ttcctctcct tcttttcttt caagttggct ttcctcacat ccctctgttc     240
aattcgcttc agcttgtctg ctttagccct catttccaga agcttcttct ctttggcatc     300
t                                                                    301

        <210> 268
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 268
aatgtctcac tcaactactt cccagcctac cgtggcctaa ttctgggagt tttcttctta      60
gatcttggga gagctggttc ttctaaggag aaggaggaag gacagatgta actttggatc     120
tcgaagagga agtctaatgg aagtaattag tcaacggtcc ttgtttagac tcttggaata     180
tgctgggtgg ctcagtgagc ccttttggag aaagcaagta ttattcttaa ggagtaacca     240
cttcccattg ttctactttc taccatcatc aattgtatat tatgtattct ttggagaact     300
a                                                                    301

        <210> 269
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 269
taacaatata cactagctat ctttttaact gtccatcatt agcaccaatg aagattcaat      60
aaaattacct ttattcacac atctcaaaac aattctgcaa attcttagtg aagtttaact     120
atagtcacag accttaaata ttcacattgt tttctatgtc tactgaaaat aagttcacta     180
cttttctgga tattctttac aaaatcttat taaaattcct ggtattatca cccccaatta     240
```

```
tacagtagca caaccacctt atgtagtttt tacatgatag ctctgtagaa gtttcacatc    300
t                                                                    301
```

    <210> 270
    <211> 301
    <212> DNA
    <213> Homo sapien

    <400> 270
```
cattgaagag cttttgcgaa acatcagaac acaagtgctt ataaaattaa ttaagcctta     60
cacaagaata catattcctt ttatttctaa ggagttaaac atagatgtag ctgatgtgga    120
gagcttgctg gtgcagtgca tattggataa cactattcat ggccgaattg atcaagtcaa    180
ccaactcctt gaactggatc atcagaagaa gggtggtgca cgatatactg cactagataa    240
tggaccaacc aactaaattc tctcaccagg ctgtatcagt aaactggctt aacagaaaac    300
a                                                                    301
```

    <210> 271
    <211> 301
    <212> DNA
    <213> Homo sapien

    <220>
    <221> misc_feature
    <222> (1)...(301)
    <223> n = A,T,C or G

    <400> 271
```
aaaaggttct cataagatta acaatttaaa taaatatttg atagaacatt ctttctcatt     60
tttatagctc atctttaggg ttgatattca gttcatgctt cccttgctgt tcttgatcca    120
gaattgcaat cacttcatca gcctgtattc gctccaattc tctataaagt gggtccaagg    180
tgaaccacag agccacagca cacctctttc ccttggtgac tgccttcacc ccatganggt    240
tctctcctcc agatganaac tgatcatgcg cccacatttt gggtttttata gaagcagtca    300
c                                                                    301
```

    <210> 272
    <211> 301
    <212> DNA
    <213> Homo sapien

    <400> 272
```
taaattgcta agccacagat aacaccaatc aaatggaaca aatcactgtc ttcaaatgtc     60
ttatcagaaa accaaatgag cctggaatct tcataatacc taaacatgcc gtatttagga    120
tccaataatt ccctcatgat gagcaagaaa aattctttgc gcacccctcc tgcatccaca    180
gcatcttctc caacaaatat aaccttgagt ggcttcttgt aatctatgtt ctttgttttc    240
ctaaggactt ccattgcatc tcctacaata ttttctctac gcaccactag aattaagcag    300
g                                                                    301
```

    <210> 273
    <211> 301
    <212> DNA
    <213> Homo sapien

```
        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 273
acatgtgtgt atgtgtatct ttgggaaaan aanaagacat cttgtttayt attttttggg    60
agagangctg ggacatggat aatcacwtaa tttgctayta tyactttaat ctgactygaa   120
gaaccgtcta aaaataaaat ttaccatgtc dtatattcct tatagtatgc ttatttcacc   180
ttytttctgt ccagagagag tatcagtgac ananatttma gggtgaamac atgmattggt   240
gggacttnty tttacngagm accctgcccg sgcgccctcg makcngantt ccgcsananc   300
t                                                                    301


        <210> 274
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 274
cttatatact ctttctcaga ggcaaaagag gagatgggta atgtagacaa ttctttgagg    60
aacagtaaat gattattaga gagaangaat ggaccaagga gacagaaatt aacttgtaaa   120
tgattctctt tggaatctga atgagatcaa gaggccagct ttagcttgtg gaaaagtcca   180
tctaggtatg gttgcattct cgtcttcttt tctgcagtag ataatgaggt aaccgaaggc   240
aattgtgctt cttttgataa gaagctttct tggtcatatc aggaaattcc aganaaagtc   300
c                                                                    301


        <210> 275
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 275
tcggtgtcag cagcacgtgg cattgaacat tgcaatgtgg agcccaaacc acagaaaatg    60
gggtgaaatt ggccaacttt ctattaactt atgttggcaa ttttgccacc aacagtaagc   120
tggcccttct aataaaagaa aattgaaagg tttctcacta aacggaatta agtagtggag   180
tcaagagact cccaggcctc agcgtacctg cccgggcggc cgctcgaagc cgaattctgc   240
agatatccat cacactggcg gncgctcgan catgcatcta gaaggnccaa ttcgccctat   300
a                                                                    301

        <210> 276
```

```
<211> 301
<212> DNA
<213> Homo sapien

<400> 276
tgtacacata ctcaataaat aaatgactgc attgtggtat tattactata ctgattatat        60
ttatcatgtg acttctaatt agaaaatgta tccaaaagca aaacagcaga tatacaaat       120
taaagagaca gaagatagac attaacagat aaggcaactt atacattgag aatccaaatc      180
caatacattt aaacatttgg gaaatgaggg ggacaaatgg aagccagatc aaatttgtgt      240
aaaactattc agtatgtttc ccttgcttca tgtctgagaa ggctctcctt caatggggat      300
g                                                                       301


<210> 277
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 277
tttgttgatg tcagtatttt attacttgcg ttatgagtgc tcacctggga aattctaaag        60
atacagagga cttggaggaa gcagagcaac tgaatttaat ttaaaagaag gaaaacattg       120
gaatcatggc actcctgata ctttcccaaa tcaacactct caatgcccca ccctcgtcct      180
caccatagtg gggagactaa agtggccacg gatttgcctt angtgtgcag tgcgttctga      240
gttcnctgtc gattacatct gaccagtctc ctttttccga agtccntccg ttcaatcttg      300
c                                                                       301


<210> 278
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 278
taccactaca ctccagcctg ggcaacagag caagacctgt ctcaaagcat aaaatggaat        60
aacatatcaa atgaaacagg gaaaatgaag ctgacaattt atggaagcca gggcttgtca       120
cagtctctac tgttattatg cattacctgg gaatttatat aagcccttaa taataatgcc      180
aatgaacatc tcatgtgtgc tcacaatgtt ctggcactat tataagtgct tcacaggttt      240
tatgtgttct tcgtaacttt atggantagg tactcggccg cgaacacgct aagccgaatt      300
c                                                                       301


<210> 279
<211> 301
<212> DNA
```

<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 279
aaagcaggaa tgacaaagct tgcttttctg gtatgttcta ggtgtattgt gacttttact   60
gttatattaa ttgccaatat aagtaaatat agattatata tgtatagtgt ttcacaaagc   120
ttagaccttt accttccagc caccccacag tgcttgatat ttcagagtca gtcattggtt   180
atacatgtgt agttccaaag cacataagct agaanaanaa atatttctag ggagcactac   240
catctgtttt cacatgaaat gccacacaca tagaactcca acatcaattt cattgcacag   300
a   301

<210> 280
<211> 301
<212> DNA
<213> Homo sapien

<400> 280
ggtactggag ttttcctccc ctgtgaaaac gtaactactg ttgggagtga attgaggatg   60
tagaaaggtg gtggaaccaa attgtggtca atggaaatag gagaatatgg ttctcactct   120
tgagaaaaaa acctaagatt agcccaggta gttgcctgta acttcagttt ttctgcctgg   180
gtttgatata gtttagggtt ggggttagat taagatctaa attacatcag gacaaagaga   240
cagactatta actccacagt taattaagga ggtatgttcc atgtttattt gttaaagcag   300
t   301

<210> 281
<211> 301
<212> DNA
<213> Homo sapien

<400> 281
aggtacaaga aggggaatgg gaaagagctg ctgctgtggc attgttcaac ttggatattc   60
gccgagcaat ccaaatcctg aatgaagggg catcttctga aaaggagat ctgaatctca   120
atgtggtagc aatggcttta tcgggttata cggatgagaa gaactccctt tggagagaaa   180
tgtgtagcac actgcgatta cagctaaata acccgtattt gtgtgtcatg tttgcatttc   240
tgacaagtga aacaggatct tacgatggag ttttgtatga aaacaaagtt gcagtacctc   300
g   301

<210> 282
<211> 301
<212> DNA
<213> Homo sapien

<400> 282
caggtactac agaattaaaa tactgacaag caagtagttt cttggcgtgc acgaattgca   60
tccagaaccc aaaaattaag aaattcaaaa agacattttg tgggcacctg ctagcacaga   120
agcgcagaag caaagcccag gcagaaccat gctaacctta cagctcagcc tgcacagaag   180
cgcagaagca aagcccaggc agaaccatgc taaccttaca gctcagcctg cacagaagcg   240

```
cagaagcaaa gcccaggcag aacatgctaa ccttacagct cagcctgcac agaagcacag      300
a                                                                       301
```

```
<210> 283
<211> 301
<212> DNA
<213> Homo sapien
```

```
<400> 283
atctgtatac ggcagacaaa ctttatarag tgtagagagg tgagcgaaag gatgcaaaag       60
cactttgagg gctttataat aatatgctgc ttgaaaaaaa aaatgtgtag ttgatactca      120
gtgcatctcc agacatagta aggggttgct ctgaccaatc aggtgatcat tttttctatc      180
acttcccagg ttttatgcaa aaattttgtt aaattctata atggtgatat gcatctttta      240
ggaaacatat acatttttaa aaatctattt tatgtaagaa ctgacagacg aatttgcttt      300
g                                                                       301
```

```
<210> 284
<211> 301
<212> DNA
<213> Homo sapien
```

```
<400> 284
caggtacaaa acgctattaa gtggcttaga atttgaacat ttgtggtctt tatttacttt       60
gcttcgtgtg tgggcaaagc aacatcttcc ctaaatatat attaccaaga aaagcaagaa      120
gcagattagg tttttgacaa aacaaacagg ccaaaagggg gctgacctgg agcagagcat      180
ggtgagaggc aaggcatgag agggcaagtt tgttgtggac agatctgtgc ctactttatt      240
actggagtaa aagaaaacaa agttcattga tgtcgaagga tatatacagt gttagaaatt      300
a                                                                       301
```

```
<210> 285
<211> 301
<212> DNA
<213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G
```

```
<400> 285
acatcaccat gatcggatcc cccacccatt atacgttgta tgtttacata aatactcttc       60
aatgatcatt agtgttttaa aaaaaatact gaaaactcct tctgcatccc aatctctaac      120
caggaaagca aatgctattt acagacctgc aagccctccc tcaaacnaaa ctatttctgg      180
attaaatatg tctgacttct tttgaggtca cacgactagg caaatgctat ttacgatctg      240
caaaagctgt ttgaagagtc aaagcccca tgtgaacacg atttctggac cctgtaacag      300
t                                                                       301
```

```
<210> 286
<211> 301
<212> DNA
<213> Homo sapien
```

<400> 286
```
taccactgca ttccagcctg ggtgacagag tgagactccg tctccaaaaa aaactttgct      60
tgtatattat ttttgcctta cagtggatca ttctagtagg aaaggacagt aagatttttt     120
atcaaaatgt gtcatgccag taagagatgt tatattcttt tctcatttct tccccaccca     180
aaaataagct accatatagc ttataagtct caaatttttg ccttttacta aaatgtgatt     240
gtttctgttc attgtgtatg cttcatcacc tatattaggc aaattccatt ttttcccttg     300
t                                                                      301
```

<210> 287
<211> 301
<212> DNA
<213> Homo sapien

<400> 287
```
tacagatctg ggaactaaat attaaaaatg agtgtggctg gatatatgga gaatgttggg      60
cccagaagga acgtagagat cagatattac aacagctttg ttttgagggt tagaaatatg     120
aaatgatttg gttatgaacg cacagtttag gcagcagggc cagaatcctg accctctgcc     180
ccgtggttat ctcctcccca gcttggctgc ctcatgttat cacagtattc cattttgttt     240
gttgcatgtc ttgtgaagcc atcaagattt tctcgtctgt tttcctctca ttggtaatgc     300
t                                                                      301
```

<210> 288
<211> 301
<212> DNA
<213> Homo sapien

<400> 288
```
gtacacctaa ctgcaaggac agctgaggaa tgtaatgggc agccgctttt aaagaagtag      60
agtcaatagg aagacaaatt ccagttccag ctcagtctgg gtatctgcaa agctgcaaaa     120
gatctttaaa gacaatttca agagaatatt tccttaaagt tggcaatttg gagatcatac     180
aaaagcatct gcttttgtga tttaatttag ctcatctggc cactggaaga atccaaacag     240
tctgccttaa ttttggatga atgcatgatg gaaattcaat aatttagaaa gttaaaaaaa     300
a                                                                      301
```

<210> 289
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 289
```
ggtacactgt ttccatgtta tgtttctaca cattgctacc tcagtgctcc tggaaactta      60
gcttttgatg tctccaagta gtccaccttc atttaactct ttgaaactgt atcatctttg     120
ccaagtaaga gtggtggcct atttcagctg ctttgacaaa atgactggct cctgacttaa     180
cgttctataa atgaatgtgc tgaagcaaag tgcccatggt ggcggcgaan aagagaaaga     240
tgtgttttgt tttggactct ctgtggtccc ttccaatgct gtgggtttcc aaccagngga     300
```

a   301

```
        <210> 290
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 290
acactgagct cttcttgata aatatacaga atgcttggca tatacaagat tctatactac        60
tgactgatct gttcatttct ctcacagctc ttaccccaa aagctttcc accctaagtg        120
ttctgacctc cttttctaat cacagtaggg atagaggcag anccacctac aatgaacatg        180
gagttctatc aagaggcaga aacagcacag aatcccagtt ttaccattcg ctagcagtgc        240
tgccttgaac aaaaacattt ctccatgtct cattttcttc atgcctcaag taacagtgag        300
a                                                                        301


        <210> 291
        <211> 301
        <212> DNA
        <213> Homo sapien

        <400> 291
caggtaccaa tttcttctat cctagaaaca tttcatttta tgttgttgaa acataacaac        60
tatatcagct agatttttt tctatgcttt acctgctatg gaaaatttga cacattctgc        120
tttactcttt tgtttatagg tgaatcacaa aatgtatttt tatgtattct gtagttcaat        180
agccatggct gtttacttca tttaatttat ttagcataaa gacattatga aaaggcctaa        240
acatgagctt cacttcccca ctaactaatt agcatctgtt atttcttaac cgtaatgcct        300
a                                                                        301


        <210> 292
        <211> 301
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G

        <400> 292
accttttagt agtaatgtct aataataaat aagaaatcaa ttttataagg tccatatagc        60
tgtattaaat aattttaag tttaaaagat aaaataccat cattttaaat gttggtattc        120
aaaaccaaag natataaccg aaaggaaaaa cagatgagac ataaaatgat ttgcnagatg        180
ggaaatatag tasttyatga atgttnatta aattccagtt ataatagtgg ctacacactc        240
tcactacaca cacagacccc acagtcctat atgccacaaa cacatttcca taacttgaaa        300
a                                                                        301
```

<210> 293
<211> 301
<212> DNA
<213> Homo sapien

<400> 293

```
ggtaccaagt gctggtgcca gcctgttacc tgttctcact gaaaagtctg gctaatgctc        60
ttgtgtagtc acttctgatt ctgacaatca atcaatcaat ggcctagagc actgactgtt       120
aacacaaacg tcactagcaa agtagcaaca gctttaagtc taaatacaaa gctgttctgt       180
gtgagaattt tttaaaaggc tacttgtata ataacccttg tcatttttaa tgtacctcgg       240
ccgcgaccac gctaagccga attctgcaga tatccatcac actggcggcc gctcgagcat       300
g                                                                       301
```

<210> 294
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 294

```
tgacccataa caatatacac tagctatctt tttaactgtc catcattagc accaatgaag        60
attcaataaa attacctta ttcacacatc tcaaaacaat tctgcaaatt cttagtgaag       120
tttaactata gtcacaganc ttaaatattc acattgtttt ctatgtctac tgaaaataag       180
ttcactactt ttctgggata ttctttacaa aatcttatta aaattcctgg tattatcacc       240
cccaattata cagtagcaca accaccttat gtagttttta catgatagct ctgtagaggt       300
t                                                                       301
```

<210> 295
<211> 305
<212> DNA
<213> Homo sapien

<400> 295

```
gtactctttc tctcccctcc tctgaattta attctttcaa cttgcaattt gcaaggatta        60
cacatttcac tgtgatgtat attgtgttgc aaaaaaaaaa gtgtctttgt ttaaaattac       120
ttggtttgtg aatccatctt gctttttccc cattggaact agtcattaac ccatctctga       180
actggtagaa aaacrtctga agagctagtc tatcagcatc tgacaggtga attggatggt       240
tctcagaacc atttcaccca gacagcctgt ttctatcctg tttaataaat tagtttgggt       300
tctct                                                                   305
```

<210> 296
<211> 301
<212> DNA
<213> Homo sapien

<400> 296

```
aggtactatg ggaagctgct aaaataatat ttgatagtaa aagtatgtaa tgtgctatct        60
```

```
cacctagtag taaactaaaa ataaactgaa actttatgga atctgaagtt attttccttg    120
attaaataga attaataaac caatatgagg aaacatgaaa ccatgcaatc tactatcaac    180
tttgaaaaag tgattgaacg aaccacttag ctttcagatg atgaacactg ataagtcatt    240
tgtcattact ataaatttta aaatctgtta ataagatggc ctatagggag gaaaaagggg    300
c                                                                    301
```

<210> 297
<211> 300
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(300)
<223> n = A,T,C or G

<400> 297
```
actgagtttt aactggacgc caagcaggca aggctggaag gttttgctct ctttgtgcta     60
aaggttttga aaaccttgaa ggagaatcat tttgacaaga agtacttaag agtctagaga    120
acaaagangt gaaccagctg aaagctctcg ggggaanctt acatgtgttg ttaggcctgt    180
tccatcattg ggagtgcact ggccatccct caaaatttgt ctgggctggc ctgagtggtc    240
accgcacctc ggccgcgacc acgctaagcc gaattctgca gatatccatc acactggcgg    300
```

<210> 298
<211> 301
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(301)
<223> n = A,T,C or G

<400> 298
```
tatggggttt gtcacccaaa agctgatgct gagaaaggcc tccctggggc ccctcccgcg     60
ggcatctgag agacctggtg ttccagtgtt tctggaaatg ggtcccagtg ccgccggctg    120
tgaagctctc agatcaatca cgggaagggc ctggcggtgg tggccacctg gaaccaccct    180
gtcctgtctg tttacatttc actaycaggt tttctctggg cattacnatt tgttcccta     240
caacagtgac ctgtgcattc tgctgtggcc tgctgtgtct gcaggtggct ctcagcgagg    300
t                                                                    301
```

<210> 299
<211> 301
<212> DNA
<213> Homo sapien

<400> 299
```
gttttgagac ggagtttcac tcttgttgcc cagactggac tgcaatggca gggtctctgc     60
tcactgcacc ctctgcctcc caggttcgag caattctcct gcctcagcct cccaggtagc    120
tgggattgca ggctcacgcc accataccca gctaattttt ttgtattttt agtagagacg    180
gagtttcgcc atgttggcca gctggtctca aactcctgac ctcaagcgac ctgcctgcct    240
```

cggcctccca aagtgctgga attataggca tgagtcaaca cgcccagcct aaagatattt   300
t   301

```
<210> 300
<211> 301
<212> DNA
<213> Homo sapien

<400> 300
```
attcagtttt atttgctgcc ccagtatctg taaccaggag tgccacaaaa tcttgccaga   60
tatgtcccac acccactggg aaaggctccc acctggctac ttcctctatc agctgggtca   120
gctgcattcc acaaggttct cagcctaatg agtttcacta cctgccagtc tcaaaactta   180
gtaaagcaag accatgacat tcccccacgg aaatcagagt ttgccccacc gtcttgttac   240
tataaagcct gcctctaaca gtccttgctt cttcacacca atcccgagcg catcccccat   300
g   301

```
<210> 301
<211> 301
<212> DNA
<213> Homo sapien

<400> 301
```
ttaaattttt gagaggataa aaaggacaaa taatctagaa atgtgtcttc ttcagtctgc   60
agaggacccc aggtctccaa gcaaccacat ggtcaagggc atgaataatt aaaagttggt   120
gggaactcac aaagaccctc agagctgaga cacccacaac agtgggagct cacaaagacc   180
ctcagagctg agacacccac aacagtggga gctcacaaag accctcagag ctgagacacc   240
cacaacagca cctcgttcag ctgccacatg tgtgaataag gatgcaatgt ccagaagtgt   300
t   301

```
<210> 302
<211> 301
<212> DNA
<213> Homo sapien

<400> 302
```
aggtacacat ttagcttgtg gtaaatgact cacaaaactg attttaaaat caagttaatg   60
tgaattttga aaattactac ttaatcctaa ttcacaataa caatggcatt aaggtttgac   120
ttgagttggt tcttagtatt atttatggta aataggctct taccacttgc aaataactgg   180
ccacatcatt aatgactgac ttcccagtaa ggctctctaa ggggtaagta ggaggatcca   240
caggatttga gatgctaagg ccccagagat cgtttgatcc aaccctctta ttttcagagg   300
g   301

```
<210> 303
<211> 301
<212> DNA
<213> Homo sapien

<400> 303
```
aggtaccaac tgtggaaata ggtagaggat catttttct ttccatatca actaagttgt   60
atattgtttt ttgacagttt aacacatctt cttctgtcag agattctttc acaatagcac   120
tggctaatgg aactaccgct tgcatgttaa aaatggtggt ttgtgaaatg atcataggcc   180

```
agtaacgggt atgttttct aactgatctt ttgctcgttc caaagggacc tcaagacttc      240
catcgatttt atatctgggg tctagaaaag gagttaatct gttttccctc ataaattcac      300
c                                                                       301
```

```
        <210> 304
        <211> 301
        <212> DNA
        <213> Homo sapien


        <400> 304
acatggatgt tattttgcag actgtcaacc tgaatttgta tttgcttgac attgcctaat       60
tattagtttc agtttcagct tacccacttt ttgtctgcaa catgcaraas agacagtgcc      120
cttttagtg tatcatatca ggaatcatct cacattggtt tgtgccatta ctggtgcagt      180
gactttcagc cacttgggta aggtggagtt ggccatatgt ctccactgca aaattactga      240
ttttcctttt gtaattaata agtgtgtgtg tgaagattct ttgagatgag gtatatatct      300
c                                                                       301
```

```
        <210> 305
        <211> 301
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(301)
        <223> n = A,T,C or G


        <400> 305
gangtacagc gtggtcaagg taacaagaag aaaaaaatgt gagtggcatc ctgggatgag       60
caggggggaca gacctggaca gacacgttgt catttgctgc tgtgggtagg aaaatgggcg      120
taaaggagga gaaacagata caaaatctcc aactcagtat taaggtattc tcatgcctag      180
aatattggta gaaacaagaa tacattcata tggcaaataa ctaaccatgg tggaacaaaa      240
ttctgggatt taagttggat accaangaaa ttgtattaaa agagctgttc atggaataag      300
a                                                                       301
```

```
        <210> 306
        <211> 8
        <212> PRT
        <213> Homo sapien


        <400> 306
Val Leu Gly Trp Val Ala Glu Leu
 1               5
```

```
        <210> 307
        <211> 637
        <212> DNA
        <213> Homo sapien


        <400> 307
acagggratg aagggaaagg gagaggatga ggaagccccc ctggggattt ggtttggtcc       60
```

```
ttgtgatcag gtggtctatg gggcttatcc ctacaaagaa gaatccagaa ataggggcac      120
attgaggaat gatacttgag cccaaagagc attcaatcat tgttttattt gccttmtttt      180
cacaccattg gtgagggagg gattaccacc ctggggttat gaagatggtt gaacacccca      240
cacatagcac cggagatatg agatcaacag tttcttagcc atagagattc acagcccaga      300
gcaggaggac gcttgcacac catgcaggat gacatggggg atgcgctcgg gattggtgtg      360
aagaagcaag gactgttaga ggcaggcttt atagtaacaa gacggtgggg caaactctga      420
tttccgtggg ggaatgtcat ggtcttgctt tactaagttt tgagactggc aggtagtgaa      480
actcattagg ctgagaacct tgtggaatgc acttgaccca sctgatagag gaagtagcca      540
ggtgggagcc tttcccagtg ggtgtgggac atatctggca agattttgtg gcactcctgg      600
ttacagatac tggggcagca aataaaactg aatcttg                              637
```

        <210> 308
        <211> 647
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(647)
        <223> n = A,T,C or G

        <400> 308
```
acgattttca ttatcatgta aatcgggtca ctcaaggggc caaccacagc tgggagccac       60
tgctcagggg aaggttcata tgggactttc tactgcccaa ggttctatac aggatataaa      120
ggngcctcac agtatagatc tggtagcaaa gaagaagaaa caaacactga tctctttctg      180
ccacccctct gacccctttgg aactcctctg acccttttaga acaagcctac ctaatatctg     240
ctagagaaaa gaccaacaac ggcctcaaag gatctcttac catgaaggtc tcagctaatt      300
cttggctaag atgtgggttc cacattaggt tctgaatatg gggggaaggg tcaatttgct      360
cattttgtgt gtggataaag tcaggatgcc caggggccag agcaggggggc tgcttgcttt     420
gggaacaatg gctgagcata taaccatagg ttatggggaa caaaacaaca tcaaagtcac      480
tgtatcaatt gccatgaaga cttgagggac ctgaatctac cgattcatct taaggcagca      540
ggaccagttt gagtggcaac aatgcagcag cagaatcaat ggaaacaaca gaatgattgc      600
aatgtccttt ttttctcct gcttctgact tgataaaagg ggaccgt                    647
```

        <210> 309
        <211> 460
        <212> DNA
        <213> Homo sapien

        <400> 309
```
actttatagt ttaggctgga cattggaaaa aaaaaaaagc cagaacaaca tgtgatagat       60
aatatgattg gctgcacact tccagactga tgaatgatga acgtgatgga ctattgtatg      120
gagcacatct tcagcaagag ggggaaatac tcatcatttt tggccagcag ttgtttgatc      180
accaaacatc atgccagaat actcagcaaa ccttcttagc tcttgagaag tcaaagtccg      240
ggggaattta ttcctggcaa ttttaattgg actccttatg tgagagcagc ggctacccag      300
ctggggtggt ggagcgaacc cgtcactagt ggacatgcag tggcagagct cctggtaacc      360
acctagagga atacacaggc acatgtgtga tgccaagcgt gacacctgta gcactcaaat      420
ttgtcttgtt tttgtctttc ggtgtgtaag attcttaagt                           460
```

        <210> 310
        <211> 539

```
      <212> DNA
      <213> Homo sapien

      <400> 310
acgggactta tcaaataaag ataggaaaag aagaaaactc aaatattata ggcagaaatg      60
ctaaaggttt taaaatatgt caggattgga agaaggcatg gataaagaac aaagttcagt     120
taggaaagag aaacacagaa ggaagagaca caataaaagt cattatgtat tctgtgagaa     180
gtcagacagt aagatttgtg ggaaatgggt tggtttgttg tatggtatgt attttagcaa     240
taatctttat ggcagagaaa gctaaaatcc tttagcttgc gtgaatgatc acttgctgaa     300
ttcctcaagg taggcatgat gaaggagggt ttagaggaga cacagacaca atgaactgac     360
ctagatagaa agccttagta tactcagcta ggaatagtga ttctgagggc acactgtgac     420
atgattatgt cattacatgt atggtagtga tggggatgat aggaaggaag aacttatggc     480
atattttcac ccccacaaaa gtcagttaaa tattgggaca ctaaccatcc aggtcaaga      539


      <210> 311
      <211> 526
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(526)
      <223> n = A,T,C or G

      <400> 311
caaatttgag ccaatgacat agaattttac aaatcaagaa gcttattctg gggccatttc      60
ttttgacgtt ttctctaaac tactaaagag gcattaatga tccataaatt atattatcta     120
catttacagc atttaaaatg tgttcagcat gaaatattag ctacagggga agctaaataa     180
attaaacatg gaataaagat ttgtccttaa atataatcta caagaagact ttgatatttg     240
tttttcacaa gtgaagcatt cttataaagt gtcataacct ttttggggaa actatgggaa     300
aaaatgggga aactctgaag ggttttaagt atcttacctg aagctacaga ctccataacc     360
tctctttaca gggagctcct gcagccccta cagaaatgag tggctgagat tcttgattgc     420
acagcaagag cttctcatct aaaccctttc ccttttttagt atctgtgtat caagtataaa     480
agttctataa actgtagtnt acttatttta atccccaaag cacagt                    526


      <210> 312
      <211> 500
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(500)
      <223> n = A,T,C or G

      <400> 312
cctctctctc cccacccct gactctagag aactgggttt tctcccagta ctccagcaat      60
tcatttctga aagcagttga gccactttat tccaaagtac actgcagatg ttcaaactct     120
ccatttctct ttcccttcca cctgccagtt ttgctgactc tcaacttgtc atgagtgtaa     180
gcattaagga cattatgctt cttcgattct gaagacaggc cctgctcatg gatgactctg     240
gcttcttagg aaaatatttt tcttccaaaa tcagtaggaa atctaaactt atcccctctt     300
```

```
tgcagatgtc tagcagcttc agacatttgg ttaagaaccc atgggaaaaa aaaaaatcct    360
tgctaatgtg gtttcctttg taaaccanga ttcttatttg nctggtatag aatatcagct    420
ctgaacgtgt ggtaaagatt tttgtgtttg aatataggag aaatcagttt gctgaaaagt    480
tagtcttaat tatctattgg                                                500
```

```
<210> 313
<211> 718
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(718)
<223> n = A,T,C or G

<400> 313
ggagatttgt gtggtttgca gccgagggag accaggaaga tctgcatggt gggaaggacc     60
tgatgataca gaggtgagaa ataagaaagg ctgctgactt taccatctga ggccacacat    120
ctgctgaaat ggagataatt aacatcacta gaaacagcaa gatgacaata taatgtctaa    180
gtagtgacat gtttttgcac atttccagcc cttttaaata tccacacaca caggaagcac    240
aaaaggaagc acagagatcc ctgggagaaa tgcccggccg ccatcttggg tcatcgatga    300
gcctcgccct gtgcctgntc ccgcttgtga gggaaggaca ttagaaaatg aattgatgtg    360
ttccttaaag gatggcagga aaacagatcc tgttgtggat atttatttga acgggattac    420
agatttgaaa tgaagtcaca aagtgagcat taccaatgag aggaaaacag acgagaaaat    480
cttgatggtt cacaagacat gcaacaaaca aaatggaata ctgtgatgac acgagcagcc    540
aactggggag gagataccac ggggcagagg tcaggattct ggccctgctg cctaactgtg    600
cgttatacca atcatttcta tttctaccct caaacaagct gtngaatatc tgacttacgg    660
ttcttntggc ccacattttc atnatccacc ccntcntttt aannttantc caaantgt      718
```

```
<210> 314
<211> 358
<212> DNA
<213> Homo sapien

<400> 314
gtttatttac attacagaaa aaacatcaag acaatgtata ctatttcaaa tatatccata     60
cataatcaaa tatagctgta gtacatgttt tcattggtgt agattaccac aaatgcaagg    120
caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg tgtagtccaa    180
gctctcggta gtccagccac tgtgaaacat gctcccttta gattaacctc gtggacgctc    240
ttgttgtatt gctgaactgt agtgccctgt attttgcttc tgtctgtgaa ttctgttgct    300
tctggggcat ttccttgtga tgcagaggac caccacacag atgacagcaa tctgaatt      358
```

```
<210> 315
<211> 341
<212> DNA
<213> Homo sapien

<400> 315
taccacctcc ccgctggcac tgatgagccg catcaccatg gtcaccagca ccatgaaggc     60
ataggtgatg atgaggacat ggaatgggcc cccaaggatg gtctgtccaa agaagcgagt    120
gaccccccatt ctgaagatgt ctggaacctc taccagcagg atgatgatag ccccaatgac    180
```

```
agtcaccagc tccccgacca gccggatatc gtccttaggg gtcatgtagg cttcctgaag      240
tagcttctgc tgtaagaggg tgttgtcccg ggggctcgtg cggttattgg tcctgggctt      300
gaggggggcgg tagatgcagc acatggtgaa gcagatgatg t                          341
```

        <210> 316
        <211> 151
        <212> DNA
        <213> Homo sapien

        <400> 316
```
agactgggca agactcttac gccccacact gcaatttggt cttgttgccg tatccattta       60
tgtgggcctt tctcgagttt ctgattataa acaccactgg agcgatgtgt tgactggact      120
cattcaggga gctctggttg caatattagt t                                      151
```

        <210> 317
        <211> 151
        <212> DNA
        <213> Homo sapien

        <400> 317
```
agaactagtg gatcctaatg aaatacctga aacatatatt ggcatttatc aatggctcaa       60
atcttcattt atctctggcc ttaaccctgg ctcctgaggc tgcggccagc agatcccagg      120
ccagggctct gttcttgcca cacctgcttg a                                      151
```

        <210> 318
        <211> 151
        <212> DNA
        <213> Homo sapien

        <400> 318
```
actggtggga ggcgctgttt agttggctgt tttcagaggg gtctttcgga gggacctcct       60
gctgcaggct ggagtgtctt tattcctggc gggagaccgc acattccact gctgaggctg      120
tggggggcggt ttatcaggca gtgataaaca t                                     151
```

        <210> 319
        <211> 151
        <212> DNA
        <213> Homo sapien

        <400> 319
```
aactagtgga tccagagcta taggtacagt gtgatctcag ctttgcaaac acattttcta       60
catagatagt actaggtatt aatagatatg taaagaaaga aatcacacca ttaataatgg      120
taagattggg tttatgtgat tttagtgggt a                                      151
```

        <210> 320
        <211> 150
        <212> DNA
        <213> Homo sapien

        <400> 320
```
aactagtgga tccactagtc cagtgtggtg gaattccatt gtgttggggt tctagatcgc       60
```

```
gagcggctgc cctttttttt ttttttttttg ggggggaatt tttttttttt aatagttatt      120
gagtgttcta cagcttacag taaataccat                                         150
```

        <210> 321
        <211> 151
        <212> DNA
        <213> Homo sapien

        <400> 321
```
agcaactttg tttttcatcc aggttatttt aggcttagga tttcctctca cactgcagtt       60
tagggtggca ttgtaaccag ctatggcata ggtgttaacc aaaggctgag taaacatggg      120
tgcctctgag aaatcaaagt cttcatacac t                                      151
```

        <210> 322
        <211> 151
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(151)
        <223> n = A,T,C or G

        <400> 322
```
atccagcatc ttctcctgtt tcttgccttc ctttttcttc ttcttasatt ctgcttgagg       60
tttgggcttg gtcagtttgc cacagggctt ggagatggtg acagtcttct ggcattcggc      120
attgtgcagg gctcgcttca nacttccagt t                                      151
```

        <210> 323
        <211> 151
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(151)
        <223> n = A,T,C or G

        <400> 323
```
tgaggacttg tkttctttttt ctttattttt aatcctctta ckttgtaaat atattgccta      60
nagactcant tactacccag tttgtggttt twtgggagaa atgtaactgg acagttagct      120
gttcaatyaa aaagacactt ancccatgtg g                                      151
```

        <210> 324
        <211> 461
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(461)

<223> n = A,T,C or G

<400> 324

```
acctgtgtgg aatttcagct ttcctcatgc aaaaggattt tgtatccccg gcctacttga    60
agaagtggtc agctaaagga atccaggttg ttggttggac tgttaatacc tttgatgaaa   120
agagttacta cgaatcccat cttggttcca gctatatcac tgacagcatg gtagaagact   180
gcgaacctca cttctagact ttcacggtgg gacgaaacgg gttcagaaac tgccaggggc   240
ctcatacagg gatatcaaaa tacccttgt gctacccagg ccctggggaa tcaggtgact    300
cacacaaatg caatagttgg tcactgcatt tttacctgaa ccaaagctaa acccggtgtt   360
gccaccatgc accatggcat gccagagttc aacactgttg ctcttgaaaa ttgggtctga   420
aaaaacgcac aagagcccct gccctgccct agctgangca c                       461
```

<210> 325
<211> 400
<212> DNA
<213> Homo sapien

<400> 325

```
acactgtttc catgttatgt ttctacacat tgctacctca gtgctcctgg aaacttagct    60
tttgatgtct ccaagtagtc caccttcatt taactctttg aaactgtatc atctttgcca   120
agtaagagtg gtggcctatt tcagctgctt tgacaaaatg actggctcct gacttaacgt   180
tctataaatg aatgtgctga agcaaagtgc ccatggtggc ggcgaagaag agaaagatgt   240
gttttgtttt ggactctctg tggtcccttc caatgctgtg ggtttccaac caggggaagg   300
gtcccttttg cattgccaag tgccataacc atgagcacta cgctaccatg gttctgcctc   360
ctggccaagc aggctggttt gcaagaatga aatgaatgat                          400
```

<210> 326
<211> 1215
<212> DNA
<213> Homo sapien

<400> 326

```
ggaggactgc agcccgcact cgcagccctg gcaggcggca ctggtcatgg aaaacgaatt    60
gttctgctcg ggcgtcctgg tgcatccgca gtgggtgctg tcagccgcac actgtttcca   120
gaactcctac accatcgggc tgggcctgca cagtcttgag gccgaccaag agccagggag   180
ccagatggtg gaggccagcc tctccgtacg gcacccagag tacaacagac ccttgctcgc   240
taacgacctc atgctcatca agttggacga atccgtgtcc gagtctgaca ccatccggag   300
catcagcatt gcttcgcagt gccctaccgc ggggaactct tgcctcgttt ctggctgggg   360
tctgctggcg aacggcagaa tgcctaccgt gctgcagtgc gtgaacgtgt cggtggtgtc   420
tgaggaggtc tgcagtaagc tctatgaccc gctgtaccac cccagcatgt tctgcgccgg   480
cggagggcaa gaccagaagg actcctgcaa cggtgactct gggggggcccc tgatctgcaa   540
cgggtacttg cagggccttg tgtctttcgg aaaagccccg tgtggccaag ttggcgtgcc   600
aggtgtctac accaacctct gcaaattcac tgagtggata gagaaaaccg tccaggccag   660
ttaactctgg ggactgggaa cccatgaaat tgacccccaa atacatcctg cggaaggaat   720
tcaggaatat ctgttcccag cccctcctcc ctcaggccca ggagtccagg cccccagccc   780
ctcctccctc aaaccaaggg tacagatccc cagcccctcc tccctcagac ccaggagtcc   840
agaccccca gcccctcctc cctcagaccc aggagtccag cccctcctcc ctcagaccca   900
ggagtccaga cccccagcc cctcctccct cagacccagg ggtccaggcc cccaaccct   960
cctccctcag actcagaggt ccaagccccc aacccctcct tccccagacc cagaggtcca  1020
ggtcccagcc cctcctccct cagacccagc ggtccaatgc cacctagact ctccctgtac  1080
acagtgcccc cttgtggcac gttgacccaa ccttaccagt tggttttttca ttttttgtcc  1140
```

ctttcccccta gatccagaaa taaagtctaa gagaagcgca aaaaaaaaaa aaaaaaaaaa   1200
aaaaaaaaaa aaaaa   1215

                <210> 327
                <211> 220
                <212> PRT
                <213> Homo sapien

                <400> 327
Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met
1   5   10   15
Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val
                20   25   30
Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly
            35   40   45
Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu
        50   55   60
Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu Leu Ala
65   70   75   80
Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu Ser Asp
                85   90   95
Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala Gly Asn
                100   105   110
Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg Met Pro
            115   120   125
Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu Val Cys
            130   135   140
Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys Ala Gly
145   150   155   160
Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly Gly Pro
                165   170   175
Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly Lys Ala
                180   185   190
Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu Cys Lys
            195   200   205
Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
210   215   220

                <210> 328
                <211> 234
                <212> DNA
                <213> Homo sapien

                <400> 328
cgctcgtctc tggtagctgc agccaaatca taaacggcga ggactgcagc ccgcactcgc   60
agccctggca ggcggcactg gtcatggaaa acgaattgtt ctgctcgggc gtcctggtgc   120
atccgcagtg ggtgctgtca gccacacact gtttccagaa ctcctacacc atcgggctgg   180
gcctgcacag tcttgaggcc gaccaagagc cagggagcca gatggtggag gcca   234

                <210> 329
                <211> 77

```
<212> PRT
<213> Homo sapien

<400> 329
Leu Val Ser Gly Ser Cys Ser Gln Ile Ile Asn Gly Glu Asp Cys Ser
1               5                   10                  15
Pro His Ser Gln Pro Trp Gln Ala Ala Leu Val Met Glu Asn Glu Leu
            20                  25                  30
Phe Cys Ser Gly Val Leu Val His Pro Gln Trp Val Leu Ser Ala Thr
        35                  40                  45
His Cys Phe Gln Asn Ser Tyr Thr Ile Gly Leu Gly Leu His Ser Leu
    50                  55                  60
Glu Ala Asp Gln Glu Pro Gly Ser Gln Met Val Glu Ala
65                  70                  75


<210> 330
<211> 70
<212> DNA
<213> Homo sapien

<400> 330
cccaacacaa tggcccgatc ccatccctga ctccgccctc aggatcgctc gtctctggta     60
gctgcagcca                                                            70


<210> 331
<211> 22
<212> PRT
<213> Homo sapien


<400> 331
Gln His Asn Gly Pro Ile Pro Ser Leu Thr Pro Pro Ser Gly Ser Leu
1               5                   10                  15
Val Ser Gly Ser Cys Ser
                20


<210> 332
<211> 2507
<212> DNA
<213> Homo sapien

<400> 332
tggtgccgct gcagccggca gagatggttg agctcatgtt cccgctgttg ctcctccttc     60
tgcccttcct tctgtatatg gctgcgcccc aaatcaggaa aatgctgtcc agtggggtgt    120
gtacatcaac tgttcagctt cctgggaaag tagttgtggt cacaggagct aatacaggta    180
tcgggaagga gacagccaaa gagctggctc agagaggagc tcgagtatat ttagcttgcc    240
gggatgtgga aaaggggggaa ttggtggcca aagagatcca gaccacgaca gggaaccagc    300
aggtgttggt gcggaaactg gacctgtctg atactaagtc tattcgagct tttgctaagg    360
gcttcttagc tgaggaaaag cacctccacg ttttgatcaa caatgcagga gtgatgatgt    420
gtccgtactc gaagacagca gatggctttg agatgcacat aggagtcaac cacttgggtc    480
acttcctcct aacccatctg ctgctagaga aactaaagga atcagcccca tcaaggatag    540
taaatgtgtc ttccctcgca catcacctgg gaaggatcca cttccataac ctgcagggcg    600
```

```
agaaattcta caatgcaggc ctggcctact gtcacagcaa gctagccaac atcctcttca      660
cccaggaact ggcccggaga ctaaaaggct ctggcgttac gacgtattct gtacaccctg      720
gcacagtcca atctgaactg gttcggcact catctttcat gagatggatg tggtggcttt      780
tctccttttt catcaagact cctcagcagg gagcccagac cagcctgcac tgtgccttaa      840
cagaaggtct tgagattcta agtgggaatc atttcagtga ctgtcatgtg gcatgggtct      900
ctgcccaagc tcgtaatgag actatagcaa ggcggctgtg ggacgtcagt tgtgacctgc      960
tgggcctccc aatagactaa caggcagtgc cagttggacc caagagaaga ctgcagcaga     1020
ctacacagta cttcttgtca aaatgattct ccttcaaggt tttcaaaacc tttagcacaa     1080
agagagcaaa accttccagc cttgcctgct tggtgtccag ttaaaactca gtgtactgcc     1140
agattcgtct aaatgtctgt catgtccaga tttactttgc ttctgttact gccagagtta     1200
ctagagatat cataatagga taagaagacc ctcatatgac ctgcacagct cattttcctt     1260
ctgaaagaaa ctactaccta ggagaatcta agctatagca gggatgattt atgcaaattt     1320
gaactagctt ctttgttcac aattcagttc ctcccaacca accagtcttc acttcaagag     1380
ggccacactg caacctcagc ttaacatgaa taacaaagac tggctcagga gcagggcttg     1440
cccaggcatg gtggatcacc ggaggtcagt agttcaagac cagcctggcc aacatggtga     1500
aaccccacct ctactaaaaa ttgtgtatat ctttgtgtgt cttcctgttt atgtgtgcca     1560
agggagtatt ttcacaaagt tcaaaacagc cacaataatc agagatggag caaaccagtg     1620
ccatccagtc tttatgcaaa tgaaatgctg caaagggaag cagattctgt atatgttggt     1680
aactacccac caagagcaca tgggtagcag ggaagaagta aaaaaagaga aggagaatac     1740
tggaagataa tgcacaaaat gaagggacta gttaaggatt aactagccct ttaaggatta    .1800
actagttaag gattaatagc aaaagayatt aaatatgcta acatagctat ggaggaattg     1860
agggcaagca cccaggactg atgaggtctt aacaaaaacc agtgtggcaa aaaaaaaaaa     1920
aaaaaaaaaa aaaaatccta aaaacaaaca aacaaaaaaa acaattcttc attcagaaaa     1980
attatcttag ggactgatat tggtaattat ggtcaattta ataatatttt ggggcatttc     2040
cttacattgt cttgacaaga ttaaaatgtc tgtgccaaaa ttttgtattt tatttggaga     2100
cttcttatca aaagtaatgc tgccaaagga agtctaagga attagtagtg ttcccatcac     2160
ttgtttggag tgtgctattc taaaagattt tgatttcctg gaatgacaat tatattttaa     2220
ctttggtggg ggaaagagtt ataggaccac agtcttcact tctgatactt gtaaattaat     2280
cttttattgc acttgttttg accattaagc tatatgttta gaaatggtca ttttacggaa     2340
aaattagaaa aattctgata atagtgcaga ataaatgaat taatgtttta cttaatttat     2400
attgaactgt caatgacaaa taaaaattct ttttgattat tttttgtttt catttaccag     2460
aataaaaacg taagaattaa aagtttgatt acaaaaaaaa aaaaaa                     2507
```

<210> 333
<211> 3030
<212> DNA
<213> Homo sapien

<400> 333
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gcaggcgact tgcgagctgg gagcgattta aaacgctttg gattcccccg gcctgggtgg       60
ggagagcgag ctgggtgccc cctagattcc ccgcccccgc acctcatgag ccgaccctcg      120
gctccatgga gcccggcaat tatgccacct tggatggagc caaggatatc gaaggcttgc      180
tgggagcggg aggggggcgg aatctggtcg cccactcccc tctgaccagc cacccagcgg      240
cgcctacgct gatgcctgct gtcaactatg ccccttgga tctgccaggc tcggcggagc      300
cgccaaagca atgccaccca tgccctgggg tgccccaggg gacgtcccca gctcccgtgc      360
cttatggtta ctttggaggc gggtactact cctgccgagt gtcccggagc tcgctgaaac      420
cctgtgccca ggcagccacc ctggccgcgt accccgcgga gactcccacg gccggggaag      480
agtaccccag ycgccccact gagtttgcct tctatccggg atatccggga acctaccagc      540
ctatggccag ttacctggac gtgtctgtgg tgcagactct gggtgctcct ggagaaccgc      600
gacatgactc cctgttgcct gtggacagtt accagtcttg ggctctcgct ggtggctgga      660
acagccagat gtgttgccag ggagaacaga acccaccagg tcccttttgg aaggcagcat      720
```

```
ttgcagactc cagcgggcag caccctcctg acgcctgcgc ctttcgtcgc ggccgcaaga    780
aacgcattcc gtacagcaag gggcagttgc gggagctgga gcgggagtat gcggctaaca    840
agttcatcac caaggacaag aggcgcaaga tctcggcagc caccagcctc tcggagcgcc    900
agattaccat ctggtttcag aaccgccggg tcaaagagaa gaaggttctc gccaaggtga    960
agaacagcgc taccccttaa gagatctcct tgcctgggtg ggaggagcga aagtgggggt   1020
gtcctgggga gaccaggaac ctgccaagcc caggctgggg ccaaggactc tgctgagagg   1080
cccctagaga caacaccctt cccaggccac tggctgctgg actgttcctc aggagcggcc   1140
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cccaaagaac ctggcccagt cataatcatt catcctgaca gtggcaataa tcacgataac   1260
cagtactagc tgccatgatc gttagcctca tattttctat ctagagctct gtagagcact   1320
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cagggaagct ttctctcaga cccccttcca ttacacctct caccctggta acagcaggaa   1440
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tcttccctta atatttctgg tggttctgac caaagcaggt catggtttgt tgagcatttg   1800
ggatcccagt gaagtagatg tttgtagcct tgcatactta gcccttccca ggcacaaacg   1860
gagtggcaga gtggtgccaa ccctgttttc ccagtccacg tagacagatt cacagtgcgg   1920
aattctggaa gctggagaca gacgggctct ttgcagagcc gggactctga gagggacatg   1980
agggcctctg cctctgtgtt cattctctga tgtcctgtac ctgggctcag tgcccggtgg   2040
gactcatctc ctggccgcgc agcaaagcca gcgggttcgt gctggtcctt cctgcacctt   2100
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ggtagctttc aatatcgcag gttcttactc ctctgcctct ataagctcaa acccaccaac   2700
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gtagagacct ttgggggtct ggaacctctg gactccccat gctctaactc ccacactctg   2940
ctatcagaaa cttaaacttg aggattttct ctgttttca ctcgcaataa aytcagagca   3000
aacaaaaaaa aaaaaaaaaa aaaactcgag                                    3030
```

<210> 334
<211> 2417
<212> DNA
<213> Homo sapien

<400> 334
```
ggcggccgct ctagagctag tgggatcccc cgggctgcac gaattcggca cgagtgagtt     60
ggagttttac ctgtattgtt ttaatttcaa caagcctgag gactagccac aaatgtaccc    120
agtttacaaa tgaggaaaca ggtgcaaaaa ggttgttacc tgtcaaaggt cgtatgtggc    180
agagccaaga tttgagccca gttatgtctg atgaacttag cctatgctct ttaaacttct    240
gaatgctgac cattgaggat atctaaactt agatcaattg cattttccct ccaagactat    300
```

```
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cccgggatct aataggctca aagaaacttc ttctagaaat ataaaagaga aaattggatt    480
atgcaaaaat tcattattaa ttttttttcat ccatccttta attcagcaaa catttatctg   540
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cagaatgcat cctcctacta atgaggtcag tacacatttg cattttaaaa tgccctgtcc    660
agctgggcat ggtggatcat gcctgtaatc tcaacattgg aaggccaagg caggaggatt    720
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tattcaatgt aaaaggataa aaactctcta aaactaaaaa caatgtttgt caggagttac    1320
aaaccatgac caactaatta tggggaatca taaaatatga ctgtatgaga tcttgatggt    1380
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cacagactgg gaggcttaag taacagaaat tcatttctca cagttctggg ggctggaagt    1560
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gggacagagg gaaagagaag gagagggaac tctctggtgt ctcgtctttc aaggacccta    1740
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cctcaccgac ctggtgatgc tggacactgc gatgaatggt aatgtggatg agaatatgat    2040
ggactcccag aaaaggagac ccagctgctc aggtggctgc aaatcattac agccttcatc    2100
ctggggagga actggggggcc tggttctggg tcagagagca gcccagtgag ggtgagagct    2160
acagcctgtc ctgccagctg gatccccagt cccggtcaac cagtaatcaa ggctgagcag    2220
atcaggcttc ccggagctgg tcttgggaag ccagccctgg ggtgagttgg ctcctgctgt    2280
ggtactgaga caatattgtc ataaattcaa tgcgcccttg tatcccttttt tcttttttat    2340
ctgtctacat ctataatcac tatgcatact agtctttgtt agtgtttcta ttcmacttaa    2400
tagagatatg ttatact                                                   2417
```

```
        <210> 335
        <211> 2984
        <212> DNA
        <213> Homo sapien

        <400> 335
atccctcctt ccccactctc ctttccagaa ggcacttggg gtcttatctg ttggactctg     60
aaaacacttc aggcgcccctt ccaaggcttc cccaaacccc taagcagccg cagaagcgct    120
cccgagctgc cttctcccac actcaggtga tcgagttgga gaggaagttc agccatcaga    180
agtacctgtc ggccctgaa cgggcccacc tggccaagaa cctcaagctc acggagaccc     240
aagtgaagat atggttccag aacagacgct ataagactaa gcgaaagcag ctctcctcgg    300
agctgggaga cttggagaag cactcctctt tgccggccct gaaagaggag gccttctccc    360
gggcctcct ggtctccgtg tataacagct atccttacta cccataccctg tactgcgtgg     420
gcagctggag cccagctttt tggtaatgcc agctcaggtg acaaccatta tgatcaaaaa    480
```

```
ctgccttccc caggggtgtct ctatgaaaag cacaagggggc caaggtcagg gagcaagagg    540
tgtgcacacc aaagctattg gagatttgcg tggaaatctc asattcttca ctggtgagac    600
aatgaaacaa cagagacagt gaaagtttta atacctaagt cattcccca gtgcatactg    660
taggtcattt tttttgcttc tggctacctg tttgaagggg agagaggggaa aatcaagtgg    720
tattttccag cactttgtat gattttggat gagctgtaca cccaaggatt ctgttctgca    780
actccatcct cctgtgtcac tgaatatcaa ctctgaaaga gcaaacctaa caggagaaag    840
gacaaccagg atgaggatgt caccaactga attaaactta agtccagaag cctcctgttg    900
gccttggaat atggccaagg ctctctctgt ccctgtaaaa gagaggggca aatagagagt    960
ctccaagaga acgccctcat gctcagcaca tatttgcatg ggaggggggag atgggtggga   1020
ggagatgaaa atatcagctt ttcttattcc tttttattcc ttttaaaatg gtatgccaac   1080
ttaagtattt acaggggtggc ccaaatagaa caagatgcac tcgctgtgat tttaagacaa   1140
gctgtataaa cagaactcca ctgcaagagg gggggccgggg ccaggagaat ctccgcttgt   1200
ccaagacagg ggcctaagga gggtctccac actgctgcta ggggctgttg cattttttta   1260
ttagtagaaa gtggaaaggc ctcttctcaa ctttttttccc ttgggctgga gaatttagaa   1320
tcagaagttt cctggagttt tcaggctatc atatatactg tatcctgaaa ggcaacataa   1380
ttcttccttc cctcctttta aaattttgtg ttccttttttg cagcaattac tcactaaagg   1440
gcttcatttt agtccagatt tttagtctgg ctgcacctaa cttatgcctc gcttatttag   1500
cccgagatct ggtctttttt tttttttttt tttttccgtc tccccaaagc tttatctgtc   1560
ttgacttttt aaaaaagttt ggggggcagat tctgaattgg ctaaaagaca tgcatttttta   1620
aaactagcaa ctcttatttc tttcctttaa aaatacatag cattaaatcc caaatcctat   1680
ttaaagacct gacagcttga gaaggtcact actgcattta taggaccttc tggtggttct   1740
gctgttacgt ttgaagtctg acaatccttg agaatctttg catgcagagg aggtaagagg   1800
tattggattt tcacagagga agaacacagc gcagaatgaa gggccaggct tactgagctg   1860
tccagtggag ggctcatggg tgggacatgg aaaagaaggc agcctaggcc ctggggagcc   1920
cagtccactg agcaagcaag ggactgagtg agcctttttgc aggaaaaggc taagaaaaag   1980
gaaaaccatt ctaaaacaca acaagaaact gtccaaatgc tttgggaact gtgtttattg   2040
cctataatgg gtccccaaaa tgggtaacct agacttcaga gagaatgagc agagagcaaa   2100
ggagaaatct ggctgtcctt ccattttcat tctgttatct caggtgagct ggtagagggg   2160
agacattaga aaaaaatgaa acaacaaaac aattactaat gaggtacgct gaggcctggg   2220
agtctcttga ctccactact taattccgtt tagtgagaaa cctttcaatt ttcttttatt   2280
agaagggcca gcttactgtt ggtggcaaaa ttgccaacat aagttaatag aaagttggcc   2340
aatttcaccc cattttctgt ggtttgggct ccacattgca atgttcaatg ccacgtgctg   2400
ctgacaccga ccggagtact agccagcaca aaaggcaggg tagcctgaat tgctttctgc   2460
tctttacatt tcttttaaaa taagcattta gtgctcagtc cctactgagt actctttctc   2520
tcccctcctc tgaatttaat tctttcaact tgcaatttgc aaggattaca catttcactg   2580
tgatgtatat tgtgttgcaa aaaaaaaaaa aagtgtcttt gtttaaaatt acttggtttg   2640
tgaatccatc ttgcttttttc cccattggaa ctagtcatta acccatctct gaactggtag   2700
aaaaacatct gaagagctag tctatcagca tctgacaggt gaattggatg gttctcagaa   2760
ccatttcacc cagacagcct gtttctatcc tgtttaataa attagtttgg gttctctaca   2820
tgcataacaa accctgctcc aatctgtcac ataaaagtct gtgacttgaa gtttagtcag   2880
cacccccacc aaactttatt tttctatgtg ttttttgcaa catatgagtg ttttgaaaat   2940
aaagtacccca tgtctttatt agaaaaaaaa aaaaaaaaaa aaaa                   2984
```

```
        <210> 336
        <211> 147
        <212> PRT
        <213> Homo sapien

        <400> 336
Pro Ser Phe Pro Thr Leu Leu Ser Arg Arg His Leu Gly Ser Tyr Leu
  1               5                  10                  15
```

```
Leu Asp Ser Glu Asn Thr Ser Gly Ala Leu Pro Arg Leu Pro Gln Thr
            20                  25                  30
Pro Lys Gln Pro Gln Lys Arg Ser Arg Ala Ala Phe Ser His Thr Gln
        35                  40                  45
Val Ile Glu Leu Glu Arg Lys Phe Ser His Gln Lys Tyr Leu Ser Ala
        50                  55                  60
Pro Glu Arg Ala His Leu Ala Lys Asn Leu Lys Leu Thr Glu Thr Gln
65                  70                  75                  80
Val Lys Ile Trp Phe Gln Asn Arg Arg Tyr Lys Thr Lys Arg Lys Gln
                85                  90                  95
Leu Ser Ser Glu Leu Gly Asp Leu Glu Lys His Ser Ser Leu Pro Ala
            100                 105                 110
Leu Lys Glu Glu Ala Phe Ser Arg Ala Ser Leu Val Ser Val Tyr Asn
        115                 120                 125
Ser Tyr Pro Tyr Tyr Pro Tyr Leu Tyr Cys Val Gly Ser Trp Ser Pro
    130                 135                 140
Ala Phe Trp
145


        <210> 337
        <211> 9
        <212> PRT
        <213> Homo sapien


        <400> 337
Ala Leu Thr Gly Phe Thr Phe Ser Ala
1               5


        <210> 338
        <211> 9
        <212> PRT
        <213> Homo sapien


        <400> 338
Leu Leu Ala Asn Asp Leu Met Leu Ile
1               5


        <210> 339
        <211> 318
        <212> PRT
        <213> Homo sapien


        <400> 339
Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Pro Phe Leu
1               5                   10                  15
Leu Tyr Met Ala Ala Pro Gln Ile Arg Lys Met Leu Ser Ser Gly Val
            20                  25                  30
Cys Thr Ser Thr Val Gln Leu Pro Gly Lys Val Val Val Thr Gly
        35                  40                  45
Ala Asn Thr Gly Ile Gly Lys Glu Thr Ala Lys Glu Leu Ala Gln Arg
```

```
            50                      55                      60
Gly Ala Arg Val Tyr Leu Ala Cys Arg Asp Val Glu Lys Gly Glu Leu
 65                      70                      75                      80
Val Ala Lys Glu Ile Gln Thr Thr Thr Gly Asn Gln Gln Val Leu Val
                        85                      90                      95
Arg Lys Leu Asp Leu Ser Asp Thr Lys Ser Ile Arg Ala Phe Ala Lys
                    100                     105                     110
Gly Phe Leu Ala Glu Glu Lys His Leu His Val Leu Ile Asn Asn Ala
                115                     120                     125
Gly Val Met Met Cys Pro Tyr Ser Lys Thr Ala Asp Gly Phe Glu Met
            130                     135                     140
His Ile Gly Val Asn His Leu Gly His Phe Leu Leu Thr His Leu Leu
145                     150                     155                     160
Leu Glu Lys Leu Lys Glu Ser Ala Pro Ser Arg Ile Val Asn Val Ser
                    165                     170                     175
Ser Leu Ala His His Leu Gly Arg Ile His Phe His Asn Leu Gln Gly
                180                     185                     190
Glu Lys Phe Tyr Asn Ala Gly Leu Ala Tyr Cys His Ser Lys Leu Ala
            195                     200                     205
Asn Ile Leu Phe Thr Gln Glu Leu Ala Arg Arg Leu Lys Gly Ser Gly
            210                     215                     220
Val Thr Thr Tyr Ser Val His Pro Gly Thr Val Gln Ser Glu Leu Val
225                     230                     235                     240
Arg His Ser Ser Phe Met Arg Trp Met Trp Trp Leu Phe Ser Phe Phe
                    245                     250                     255
Ile Lys Thr Pro Gln Gln Gly Ala Gln Thr Ser Leu His Cys Ala Leu
                260                     265                     270
Thr Glu Gly Leu Glu Ile Leu Ser Gly Asn His Phe Ser Asp Cys His
            275                     280                     285
Val Ala Trp Val Ser Ala Gln Ala Arg Asn Glu Thr Ile Ala Arg Arg
            290                     295                     300
Leu Trp Asp Val Ser Cys Asp Leu Leu Gly Leu Pro Ile Asp
305                     310                     315
```

```
        <210> 340
        <211> 483
        <212> DNA
        <213> Homo sapien

        <400> 340
gccgaggtct gccttcacac ggaggacacg agactgcttc ctcaagggct cctgcctgcc        60
tggacactgg tgggaggcgc tgtttagttg ctgtttttca gaggggtctt tcggagggac       120
ctcctgctgc aggctggagt gtctttattc ctggcgggag accgcacatt ccactgctga       180
ggttgtgggg gcggtttatc aggcagtgat aaacataaga tgtcatttcc ttgactccgg       240
ccttcaattt tctctttggc tgacgacgga gtccgtggtg tcccgatgta actgaccccт       300
gctccaaacg tgacatcact gatgctcttc tcgggggtgc tgatggcccg cttggtcacg       360
tgctcaatct cgccattcga ctcttgctcc aaactgtatg aagacacctg actgcacgtt       420
ttttctgggc ttccagaatt taaagtgaaa ggcagcactc ctaagctccg actccgatgc       480
ctg                                                                      483

        <210> 341
```

<211> 344
<212> DNA
<213> Homo sapien

<400> 341
```
ctgctgctga gtcacagatt tcattataaa tagcctccct aaggaaaata cactgaatgc      60
tattttttact aaccattcta tttttataga aatagctgag agtttctaaa ccaactctct     120
gctgccttac aagtattaaa tattttactt ctttccataa agagtagctc aaaatatgca     180
attaatttaa taatttctga tgatggtttt atctgcagta atatgtatat catctattag     240
aatttactta atgaaaaact gaagagaaca aaatttgtaa ccactagcac ttaagtactc     300
ctgattctta acattgtctt taatgaccac aagacaacca acag                      344
```

<210> 342
<211> 592
<212> DNA
<213> Homo sapien

<400> 342
```
acagcaaaaa agaaactgag aagcccaaty tgctttcttg ttaacatcca cttatccaac      60
caatgtggaa acttcttata cttggttcca ttatgaagtt ggacaattgc tgctatcaca     120
cctggcaggt aaaccaatgc caagagagtg atggaaacca ttggcaagac tttgttgatg     180
accaggattg gaattttata aaaatattgt tgatgggaag ttgctaaagg gtgaattact     240
tccctcagaa gagtgtaaag aaaagtcaga gatgctataa tagcagctat tttaattggc     300
aagtgccact gtggaaagag ttcctgtgtg tgctgaagtt ctgaagggca gtcaaattca     360
tcagcatggg ctgtttggtg caaatgcaaa agcacaggtc tttttagcat gctggtctct     420
cccgtgtcct tatgcaaata atcgtcttct tctaaatttc tcctaggctt cattttccaa     480
agttcttctt ggtttgtgat gtcttttctg ctttccatta attctataaa atagtatggc     540
ttcagccacc cactcttcgc cttagcttga ccgtgagtct cggctgccgc tg             592
```

<210> 343
<211> 382
<212> DNA
<213> Homo sapien

<400> 343
```
ttcttgacct cctcctcctt caagctcaaa caccacctcc cttattcagg accggcactt      60
cttaatgttt gtggctttct ctccagcctc tcttaggagg ggtaatggtg gagttggcat     120
cttgtaactc tcctttctcc tttcttcccc tttctctgcc cgcctttccc atcctgctgt     180
agacttcttg attgtcagtc tgtgtcacat ccagtgattg ttttggtttc tgttcccttt     240
ctgactgccc aaggggctca gaaccccagc aatcccttcc tttcactacc ttcttttttg     300
ggggtagttg gaagggactg aaattgtggg gggaaggtag gaggcacatc aataaagagg     360
aaaccaccaa gctgaaaaaa aa                                              382
```

<210> 344
<211> 536
<212> DNA
<213> Homo sapien

<400> 344
```
ctgggcctga agctgtaggg taaatcagag gcaggcttct gagtgatgag agtcctgaga      60
caataggcca cataaacttg gctggatgga acctcacaat aaggtggtca cctcttgttt     120
```

```
gtttaggggg atgccaagga taaggccagc tcagttatat gaagagaagc agaacaaaca      180
agtctttcag agaaatggat gcaatcagag tgggatcccg gtcacatcaa ggtcacactc      240
caccttcatg tgcctgaatg gttgccaggt cagaaaaatc cacccttac gagtgcggct       300
tcgaccctat atccccgcc cgcgtccctt tctccataaa attcttctta gtagctatta      360
ccttcttatt atttgatcta gaaattgccc tccttttacc cctaccatga gccctacaaa      420
caactaacct gccactaata gttatgtcat ccctcttatt aatcatcatc ctagccctaa      480
gtctggccta tgagtgacta caaaaaggat tagactgagc cgaataacaa aaaaaa        536


        <210> 345
        <211> 251
        <212> DNA
        <213> Homo sapien


        <400> 345
accttttgag gtctctctca ccacctccac agccaccgtc accgtgggat gtgctggatg       60
tgaatgaagc ccccatcttt gtgcctcctg aaaagagagt ggaagtgtcc gaggactttg      120
gcgtgggcca ggaaatcaca tcctacactg cccaggagcc agacacattt atggaacaga      180
aaataacata tcggatttgg agagacactg ccaactggct ggagattaat ccggacactg      240
gtgccatttc c                                                           251


        <210> 346
        <211> 282
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(282)
        <223> n = A,T,C or G


<400> 346
cgcgtctctg acactgtgat catgacaggg gttcaaacag aaagtgcctg ggccctcctt       60
ctaagtcttg ttaccaaaaa aaggaaaaag aaaagatctt ctcagttaca aattctggga      120
agggagacta tacctggctc ttgccctaag tgagaggtct tccctcccgc accaaaaaat      180
agaaaggctt tctatttcac tggcccaggt aggggaagg agagtaactt tgagtctgtg       240
ggtctcattt cccaaggtgc cttcaatgct catnaaaacc aa                         282


        <210> 347
        <211> 201
        <212> DNA
        <213> Homo sapien


        <220>
        <221> misc_feature
        <222> (1)...(201)
        <223> n = A,T,C or G


        <400> 347
acacacataa tattataaaa tgccatctaa ttggaaggag ctttctatca ttgcaagtca       60
taaatataac ttttaaaana ntactancag cttttaccta ngctcctaaa tgcttgtaaa      120
tctgagactg actggacca cccagaccca gggcaaagat acatgttacc atatcatctt       180
```

```
tataaagaat tttttttgt c                                          201
```

```
        <210> 348
        <211> 251
        <212> DNA
        <213> Homo sapien


        <400> 348
ctgttaatca caacatttgt gcatcacttg tgccaagtga gaaaatgttc taaaatcaca      60
agagagaaca gtgccagaat gaaactgacc ctaagtccca ggtgcccctg ggcaggcaga     120
aggagacact cccagcatgg aggagggttt atcttttcat cctaggtcag gtctacaatg     180
ggggaaggtt ttattataga actcccaaca gcccacctca ctcctgccac ccacccgatg     240
gccctgcctc c                                                          251


        <210> 349
        <211> 251
        <212> DNA
        <213> Homo sapien


        <400> 349
taaaaatcaa gccatttaat tgtatctttg aaggtaaaca atatatggga gctggatcac      60
aacccctgag gatgccagag ctatgggtcc agaacatggt gtggtattat caacagagtt     120
cagaagggtc tgaactctac gtgttaccag agaacataat gcaattcatg cattccactt     180
agcaattttg taaaatacca gaaacagacc ccaagagtct ttcaagatga ggaaaattca     240
actcctggtt t                                                          251


        <210> 350
        <211> 908
        <212> DNA
        <213> Homo sapien


        <400> 350
ctggacactt tgcgagggct tttgctggct gctgctgctg cccgtcatgc tactcatcgt      60
agcccgcccg gtgaagctcg ctgctttccc tacctcctta agtgactgcc aaacgcccac     120
cggctggaat tgctctggtt atgatgacag agaaaatgat ctcttcctct gtgacaccaa     180
cacctgtaaa tttgatgggg aatgtttaag aattggagac actgtgactt gcgtctgtca     240
gttcaagtgc aacaatgact atgtgcctgt gtgtggctcc aatggggaga gctaccagaa     300
tgagtgttac ctgcgacagg ctgcatgcaa acagcagagt gagatacttg tggtgtcaga     360
aggatcatgt gccacagtcc atgaaggctc tggagaaact agtcaaaagg agacatccac     420
ctgtgatatt tgccagtttg gtgcagaatg tgacgaagat gccgaggatg tctggtgtgt     480
gtgtaatatt gactgttctc aaaccaactt caatcccctc tgcgcttctg atgggaaatc     540
ttatgataat gcatgccaaa tcaaagaagc atcgtgtcag aaacaggaga aaattgaagt     600
catgtctttg ggtcgatgtc aagataacac aactacaact actaagtctg aagatgggca     660
ttatgcaaga acagattatg cagagaatgc taacaaatta gaagaaagtg ccagagaaca     720
ccacatacct tgtccggaac attacaatgg cttctgcatg catgggaagt gtgagcattc     780
tatcaatatg caggagccat cttgcaggtg tgatgctggt tatactggac aacactgtga     840
aaaaaaggac tacagtgttc tatacgttgt tcccggtcct gtacgatttc agtatgtctt     900
aatcgcag                                                             908


        <210> 351
        <211> 472
```

```
<212> DNA
<213> Homo sapien

<400> 351
ccagttattt gcaagtggta agagcctatt taccataaat aatactaaga accaactcaa        60
gtcaaacctt aatgccattg ttattgtgaa ttaggattaa gtagtaattt tcaaaattca       120
cattaacttg attttaaaat cagwtttgyg agtcatttac cacaagctaa atgtgtacac       180
tatgataaaa acaaccattg tattcctgtt tttctaaaca gtcctaattt ctaacactgt       240
atatatcctt cgacatcaat gaactttgtt ttcttttact ccagtaataa agtaggcaca       300
gatctgtcca caacaaactt gccctctcat gccttgcctc tcaccatgct ctgctccagg       360
tcagccccct tttggcctgt ttgttttgtc aaaaacctaa tctgcttctt gcttttcttg       420
gtaatatata tttagggaag atgttgcttt gcccacacac gaagcaaagt aa               472


        <210> 352
        <211> 251
        <212> DNA
        <213> Homo sapien

        <400> 352
ctcaaagcta atctctcggg aatcaaacca gaaaagggca aggatcttag gcatggtgga        60
tgtggataag gccaggtcaa tggctgcaag catgcagaga aagaggtaca tcggagcgtg       120
caggctgcgt tccgtcctta cgatgaagac cacgatgcag tttccaaaca ttgccactac       180
atacatggaa aggaggggga agccaaccca gaaatgggct ttctctaatc ctgggatacc       240
aataagcaca a                                                             251


        <210> 353
        <211> 436
        <212> DNA
        <213> Homo sapien

        <400> 353
tttttttttt tttttttttt tttttacaa caatgcagtc atttatttat tgagtatgtg         60
cacattatgg tattattact atactgatta tatttatcat gtgacttcta attaraaaat       120
gtatccaaaa gcaaaacagc agatatacaa aattaaagag acagaagata gacattaaca       180
gataaggcaa cttatacatt gacaatccaa atccaataca tttaaacatt tgggaaatga       240
gggggacaaa tggaagccar atcaaatttg tgtaaaacta ttcagtatgt ttcccttgct       300
tcatgtctga raaggctctc ccttcaatgg ggatgacaaa ctccaaatgc cacacaaatg       360
ttaacagaat actagattca cactggaacg ggggtaaaga agaaattatt ttctataaaa       420
gggctcctaa tgtagt                                                       436


        <210> 354
        <211> 854
        <212> DNA
        <213> Homo sapien

        <400> 354
ccttttctag ttcaccagtt ttctgcaagg atgctggtta gggagtgtct gcaggaggag        60
caagtctgaa accaaatcta ggaaacatag gaaacgagcc aggcacaggg ctggtgggcc       120
atcagggacc accctttggg ttgatatttt gcttaatctg catcttttga gtaagatcat       180
ctggcagtag aagctgttct ccaggtacat ttctctagct catgtacaaa aacatcctga       240
aggactttgt caggtgcctt gctaaaagcc agatgcgttc ggcacttcct tggtctgagg       300
```

```
ttaattgcac acctacaggc actgggctca tgctttcaag tattttgtcc tcactttagg    360
gtgagtgaaa gatccccatt ataggagcac ttgggagaga tcatataaaa gctgactctt    420
gagtacatgc agtaatgggg tagatgtgtg tggtgtgtct tcattcctgc aagggtgctt    480
gttagggagt gtttccagga ggaacaagtc tgaaaccaat catgaaataa atggtaggtg    540
tgaactggaa aactaattca aaagagagat cgtgatatca gtgtggttga tacaccttgg    600
caatatggaa ggctctaatt tgcccatatt tgaaataata attcagcttt ttgtaataca    660
aaataacaaa ggattgagaa tcatggtgtc taatgtataa aagacccagg aaacataaat    720
atatcaactg cataaatgta aaatgcatgt gacccaagaa ggccccaaag tggcagacaa    780
cattgtaccc attttccctt ccaaaatgtg agcggcgggc ctgctgcttt caaggctgtc    840
acacgggatg tcag                                                      854
```

```
        <210> 355
        <211> 676
        <212> DNA
        <213> Homo sapien

        <400> 355
gaaattaagt atgagctaaa ttccctgtta aaacctctag gggtgacaga tctcttcaac     60
caggtcaaag ctgatctttc tggaatgtca ccaaccaagg gcctatattt atcaaaagcc    120
atccacaagt catacctgga tgtcagcgaa gagggcacgg aggcagcagc agccactggg    180
gacagcatcg ctgtaaaaag cctaccaatg agagctcagt tcaaggcgaa ccacccttc    240
ctgttcttta taaggcacac tcataccaac acgatcctat tctgtggcaa gcttgcctct    300
ccctaatcag atggggttga gtaaggctca gagttgcaga tgaggtgcag agacaatcct    360
gtgactttcc cacggccaaa aagctgttca cacctcacgc acctctgtgc ctcagtttgc    420
tcatctgcaa aataggtcta ggatttcttc caaccatttc atgagttgtg aagctaaggc    480
tttgttaatc atggaaaaag gtagacttat gcagaaagcc tttctggctt tcttatctgt    540
ggtgtctcat ttgagtgctg tccagtgaca tgatcaagtc aatgagtaaa attttaaggg    600
attagatttt cttgacttgt atgtatctgt gagatcttga ataagtgacc tgacatctct    660
gcttaaagaa aaccag                                                    676
```

```
        <210> 356
        <211> 574
        <212> DNA
        <213> Homo sapien

        <400> 356
tttttttttt tttttcagga aaacattctc ttactttatt tgcatctcag caaaggttct     60
catgtggcac ctgactggca tcaaaccaaa gttcgtaggc caacaaagat gggccactca    120
caagcttccc atttgtagat ctcagtgcct atgagtatct gacacctgtt cctctcttca    180
gtctcttagg gaggcttaaa tctgtctcag gtgtgctaag agtgccagcc caaggkggtc    240
aaaagtccac aaaactgcag tctttgctgg gatagtaagc caagcagtgc ctggacagca    300
gagttctttt cttgggcaac agataaccag acaggactct aatcgtgctc ttattcaaca    360
ttcttctgtc tctgcctaga ctggaataaa aagccaatct ctctcgtggc acagggaagg    420
agatacaagc tcgtttacat gtgatagatc taacaaaggc atctaccgaa gtctggtctg    480
gatagacggc acaggagct cttaggtcag cgctgctggt tggaggacat tcctgagtcc    540
agctttgcag cctttgtgca acagtacttt ccca                                574
```

```
        <210> 357
        <211> 393
        <212> DNA
        <213> Homo sapien
```

```
<400> 357
tttttttttt tttttttttt tttttttttt tacagaatat aratgcttta tcactgkact      60
taatatggkg kcttgttcac tatacttaaa aatgcaccac tcataaatat ttaattcagc     120
aagccacaac caaracttga ttttatcaac aaaaacccct aaatataaac ggsaaaaaag     180
atagatataa ttattccagt ttttttaaaa cttaaaarat attccattgc cgaattaara     240
araarataag tgttatatgg aaagaagggc attcaagcac actaaaraaa cctgaggkaa     300
gcataatctg tacaaaatta aactgtcctt tttggcattt taacaaattt gcaacgktct     360
ttttttttt tttctgtttt tttttttttt tac                                  393
```

```
<210> 358
<211> 630
<212> DNA
<213> Homo sapien
```

```
<400> 358
acagggtaaa caggaggatc cttgctctca cggagcttac attctagcag gaggacaata      60
ttaatgttta taggaaaatg atgagtttat gacaaaggaa gtagatagtg ttttacaaga     120
gcatagagta gggaagctaa tccagcacag ggaggtcaca gagacatccc taaggaagtg     180
gagtttaaac tgagagaagc aagtgcttaa actgaaggat gtgttgaaga agaagggaga     240
gtagaacaat ttgggcagag ggaaccttat agaccctaag gtgggaaggt tcaaagaact     300
gaaagagagc tagaacagct ggagccgttc tccggtgtaa agaggagtca aagagataag     360
attaaagatg tgaagattaa gatcttggtg gcattcaggg attggcactt ctacaagaaa     420
tcactgaagg gagtaatgtg acattacttt tcacttcagg atggccattc taactccagg     480
gggtagactg gactaggtaa gactggaggc aggtagacct cttctaaggc ctgcgatagt     540
gaaagacaaa aataagtggg gaaattcagg ggatagtgaa aatcagtagg acttaatgag     600
caagccagag gttcctccac aacaaccagt                                     630
```

```
<210> 359
<211> 620
<212> DNA
<213> Homo sapien
```

```
<400> 359
acagcattcc aaaatataca tctagagact aarrgtaaat gctctatagt gaagaagtaa      60
taattaaaaa atgctactaa tatagaaaat ttataatcag aaaaataaat attcagggag     120
ctcaccagaa gaataaagtg ctctgccagt tattaaagga ttactgctgg tgaattaaat     180
atggcattcc ccaagggaaa tagagagatt cttctggatt atgttcaata tttatttcac     240
aggattaact gttttaggaa cagatataaa gcttcgccac ggaagagatg gacaaagcac     300
aaagacaaca tgatacctta ggaagcaaca ctaccctttc aggcataaaa tttggagaaa     360
tgcaacatta tgcttcatga ataatatgta gaaagaaggt ctgatgaaaa tgacatcctt     420
aatgtaagat aactttataa gaattctggg tcaaataaaa ttctttgaag aaaacatcca     480
aatgtcattg acttatcaaa tactatcttg gcatataacc tatgaaggca aaactaaaca     540
aacaaaaagc tcacaccaaa caaaaccatc aacttatttt gtattctata acatacgaga     600
ctgtaaagat gtgacagtgt                                                620
```

```
<210> 360
<211> 431
<212> DNA
<213> Homo sapien
```

<400> 360
```
aaaaaaaaaa agccagaaca acatgtgata gataatatga ttggctgcac acttccagac    60
tgatgaatga tgaacgtgat ggactattgt atggagcaca tcttcagcaa gaggggggaaa   120
tactcatcat ttttggccag cagttgtttg atcaccaaac atcatgccag aatactcagc   180
aaaccttctt agctcttgag aagtcaaagt ccggggggaat ttattcctgg caattttaat   240
tggactcctt atgtgagagc agcggctacc cagctggggt ggtggagcga acccgtcact   300
agtggacatg cagtggcaga gctcctggta accacctaga ggaatacaca ggcacatgtg   360
tgatgccaag cgtgacacct gtagcactca aatttgtctt gtttttgtct ttcggtgtgt   420
agattcttag t                                                        431
```

<210> 361
<211> 351
<212> DNA
<213> Homo sapien

<400> 361
```
acactgattt ccgatcaaaa gaatcatcat ctttaccttg acttttcagg gaattactga    60
actttcttct cagaagatag ggcacagcca ttgccttggc ctcacttgaa gggtctgcat   120
ttgggtcctc tggtctcttg ccaagtttcc cagccactcg agggagaaat atcgggaggt   180
ttgacttcct ccggggcttt cccgagggct tcaccgtgag ccctgcggcc ctcagggctg   240
caatcctgga ttcaatgtct gaaacctcgc tctctgcctg ctggacttct gaggccgtca   300
ctgccactct gtcctccagc tctgacagct cctcatctgt ggtcctgttg t           351
```

<210> 362
<211> 463
<212> DNA
<213> Homo sapien

<400> 362
```
acttcatcag gccataatgg gtgcctcccg tgagaatcca agcacctttg gactgcgcga    60
tgtagatgag ccggctgaag atcttgcgca tgcgcggctt cagggcgaag ttcttggcgc   120
ccccggtcac agaaatgacc aggttgggtg ttttcaggtg ccagtgctgg gtcagcagct   180
cgtaaaggat ttccgcgtcc gtgtcgcagg acagacgtat atacttccct ttcttcccca   240
gtgtctcaaa ctgaatatcc ccaaaggcgt cggtaggaaa ttccttggtg tgtttcttgt   300
agttccattt ctcactttgg ttgatctggg tgccttccat gtgctggctc tgggcatagc   360
cacacttgca cacattctcc ctgataagca cgatggtgtg gacaggaagg aaggatttca   420
ttgagcctgc ttatggaaac tggtattgtt agcttaaata gac                   463
```

<210> 363
<211> 653
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(653)
<223> n = A,T,C or G

<400> 363
```
accccccgagt ncctgnctgg catactgnga acgaccaacg acacacccaa gctcggcctc    60
ctcttggnga ttctgggtga catcttcatg aatggcaacc gtgccagwga ggctgtcctc   120
```

```
tgggaggcac tacgcaagat gggactgcgt cctggggtga gacatcctct ccttggagat    180
ctaacgaaac ttctcaccta tgagttgtaa agcagaaata cctgnactac agacgagtgc    240
ccaacagcaa cccccggaa gtatgagttc ctctrgggcc tccgttccta ccatgagasc    300
tagcaagatg naagtgttga gantcattgc agaggttcag aaaagagacc cntcgtgact    360
ggtctgcaca gttcatggag gctgcagatg aggccttgga tgctctggat gctgctgcag    420
ctgaggccga agcccgggct gaagcaagaa cccgcatggg aattggagat gaggctgtgt    480
ntgggccctg gagctgggat gacattgagt ttgagctgct gacctgggat gaggaaggag    540
attttggaga tccntggtcc agaattccat ttaccttctg ggccagatac caccagaatg    600
cccgctccag attccctcag acctttgccg gtcccattat tggtcstggt ggt    653
```

        <210> 364
        <211> 401
        <212> DNA
        <213> Homo sapien

        <400> 364
```
actagaggaa agacgttaaa ccactctact accacttgtg gaactctcaa agggtaaatg    60
acaaagccaa tgaatgactc taaaaacaat atttacattt aatggtttgt agacaataaa    120
aaaacaaggt ggatagatct agaattgtaa cattttaaga aaaccatagc atttgacaga    180
tgagaaagct caattataga tgcaaagtta taactaaact actatagtag taaagaaata    240
catttcacac ccttcatata aattcactat cttggcttga ggcactccat aaaatgtatc    300
acgtgcatag taaatcttta tatttgctat ggcgttgcac tagaggactt ggactgcaac    360
aagtggatgc gcggaaaatg aaatcttctt caatagccca g    401
```

        <210> 365
        <211> 356
        <212> DNA
        <213> Homo sapien

        <400> 365
```
ccagtgtcat atttgggctt aaaatttcaa gaagggcact tcaaatggct ttgcatttgc    60
atgtttcagt gctagagcgt aggaatagac cctggcgtcc actgtgagat gttcttcagc    120
taccagagca tcaagtctct gcagcaggtc attcttgggt aaagaaatga cttccacaaa    180
ctctccatcc cctggctttg gcttcggcct tgcgtttttcg gcatcatctc cgttaatggt    240
gactgtcacg atgtgtatag tacagtttga caagcctggg tccatacaga ccgctggaga    300
acattcggca atgtcccctt tgtagccagt ttcttcttcg agctcccgga gagcag    356
```

        <210> 366
        <211> 1851
        <212> DNA
        <213> Homo sapien

        <400> 366
```
tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta    60
cttccgtgtt cttcattctt cttcaatagc cataaatctt ctagctctgg ctggctgttt    120
tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga    180
ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg    240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag    300
aagatacatc aacatttgc tcaagtagag ggctgactat acttgctgat ccacaacata    360
cagcaagtat gagagcagtt cttccatatc tatccagcgc atttaaattc gctttttct    420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga    480
```

```
ggccatgctt gttttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta    540
atttatcttc attgtagaca gcatagtgta gagtggtatt tccatactca tctggaatat    600
ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg    660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca    720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct    780
tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttctgg    840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt    900
acctgggatc catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc    960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt   1020
cttcacagag gagtcgttgt ggtctccaga agtgcccacg ttgctcttgc cgctccccct   1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct   1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc   1200
acagaggatg agatccagaa accacaatat ccattcacaa acaaacactt ttcagccaga   1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctaccca atcacacatc   1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat   1380
aatataattt tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag   1440
ccagtcgcag agaagccaca ctgaagctct gtcctcagcc atcagcgcca cggacaggar   1500
tgtgtttctt ccccagtgat gcagcctcaa gttatcccga agctgccgca gcacacggtg   1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa   1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca   1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctcagaggaa atgcttctaa   1740
cttttcccca tttagtatta tgttggctgt gggcttgtca taggtggttt ttattacttt   1800
aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c            1851
```

```
        <210> 367
        <211> 668
        <212> DNA
        <213> Homo sapien

        <400> 367
cttgagcttc caaataygga agactggccc ttacacasgt caatgttaaa atgaatgcat     60
ttcagtattt tgaagataaa attrgtagat ctataccttg ttttttgatt cgatatcagc    120
accrtataag agcagtgctt tggccattaa tttatctttc attrtagaca gcrtagtgya    180
gagtggtatt tccatactca tctggaatat ttggatcagt gccatgttcc agcaacatta    240
acgcacattc atcttcctgg cattgtacgg cctgtcagta ttagacccaa aaacaaatta    300
catatcttag gaattcaaaa taacattcca cagctttcac caactagtta tatttaaagg    360
agaaaactca tttttatgcc atgtattgaa atcaaaccca cctcatgctg atatagttgg    420
ctactgcata cctttatcag agctgtcctc tttttgttgt caaggacatt aagttgacat    480
cgtctgtcca gcaggagttt tactacttct gaattcccat tggcagaggc cagatgtaga    540
gcagtcctat gagagtgaga agactttta ggaaattgta gtgcactagc tacagccata    600
gcaatgattc atgtaactgc aaacactgaa tagcctgcta ttactctgcc ttcaaaaaaa    660
aaaaaaaa                                                              668
```

```
        <210> 368
        <211> 1512
        <212> DNA
        <213> Homo sapien

        <400> 368
gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg     60
tgggctgggc trgaatcccc tgctgggggtt ggcaggtttt ggctgggatt gactttytc    120
```

```
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg      180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat      240
tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag      300
tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct      360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc      420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac      480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc      540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagt      600
gccttcatgg agcccaggta ccacgtccgt ggagaagatc tggacaagct ccacagagct      660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cactgacgtg      720
aacaagaagg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca      780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag      840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg      900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct      960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa     1020
tcaaaaaaca aggtatagat ctactaattt tatcttcaaa atactgaaat gcattcattt     1080
taacattgac gtgtgtaagg gccagtcttc cgtatttgga agctcaagca taacttgaat     1140
gaaaatattt tgaaatgacc taattatctm agactttatt ttaaatattg ttattttcaa     1200
agaagcatta gagggtacag ttttttttttt ttaaatgcac ttctggtaaa tacttttgtt     1260
gaaaacactg aatttgtaaa aggtaatact tactattttt caatttttcc ctcctaggat     1320
ttttttcccc taatgaatgt aagatggcaa aatttgccct gaaataggtt ttacatgaaa     1380
actccaagaa aagttaaaca tgtttcagtg aatagagatc ctgctccttt ggcaagttcc     1440
taaaaaacag taatagatac gaggtgatgc gcctgtcagt ggcaaggttt aagatatttc     1500
tgatctcgtg cc                                                         1512
```

```
        <210> 369
        <211> 1853
        <212> DNA
        <213> Homo sapien

        <400> 369
gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg       60
tgggctgggc trgaatcccc tgctgggggtt ggcaggtttt ggctgggatt gactttttytc      120
ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg      180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat      240
tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag      300
tggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct      360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc      420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac      480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtggtgctg ccactgcttc      540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy      600
gccttcatgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct      660
gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg      720
aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca      780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag      840
aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg      900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct      960
rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa     1020
tcaaaaaaca agcatggcct cacaccactg ytacttggtr tacatgagca aaaacagcaa     1080
gtsgtgaaat ttttaatyaa gaaaaaagcg aatttaaaat gcrctggata gatatggaag     1140
ractgctctc atacttgctg tatgttgtgg atcagcaagt atagtcagcc ytctacttga     1200
```

```
gcaaaatrtt gatgtatctt ctcaagatct ggaaagacgg ccagagagta tgctgtttct    1260
agtcatcatc atgtaatttg ccagttactt tctgactaca aagaaaaaca gatgttaaaa    1320
atctcttctg aaaacagcaa tccagaacaa gacttaaagc tgacatcaga ggaagagtca    1380
caaaggctta aaggaagtga aaacagccag ccagaggcat ggaaactttt aaatttaaac    1440
ttttggttta atgttttttt tttttgcctt aataatatta gatagtccca aatgaaatwa    1500
cctatgagac taggctttga gaatcaatag attctttttt taagaatctt ttggctagga    1560
gcggtgtctc acgcctgtaa ttccagcacc ttgagaggct gaggtgggca gatcacgaga    1620
tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaatacaa    1680
aaacttagct gggtgtggtg gcgggtgcct gtagtcccag ctactcagga rgctgaggca    1740
ggagaatggc atgaacccgg gaggtggagg ttgcagtgag ccgagatccg ccactacact    1800
ccagcctggg tgacagagca agactctgtc tcaaaaaaaa aaaaaaaaa aaa           1853
```

        <210> 370
        <211> 2184
        <212> DNA
        <213> Homo sapien

        <400> 370

```
ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata      60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca     120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc     180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat     240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg     300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc     360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg     420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta     480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga     540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga     600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca     660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata     720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggagc      780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg     840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcaggggagc ggcaagagca     900
acgtggtcgc ttggggagac tacgatgaca gcgccttcat ggatcccagg taccacgtcc     960
atggagaaga tctggacaag ctccacagag ctgcctggtg gggtaaagtc cccagaaagg    1020
atctcatcgt catgctcagg gacacggatg tgaacaagag ggacaagcaa aagaggactg    1080
ctctacatct ggcctctgcc aatgggaatt cagaagtagt aaaactcgtg ctggacagac    1140
gatgtcaact taatgtcctt gacaacaaaa agaggacagc tctgacaaag gccgtacaat    1200
gccaggaaga tgaatgtgcg ttaatgttgc tggaacatgg cactgatcca aatattccag    1260
atgagtatgg aaataccact ctacactatg ctgtctacaa tgaagataaa ttaatggcca    1320
aagcactgct cttatacggt gctgatatcg aatcaaaaaa caagcatggc ctcacaccac    1380
tgctacttgg tatacatgag caaaaacagc aagtggtgaa atttttaatc aagaaaaaag    1440
cgaatttaaa tgcgctggat agatatggaa gaactgctct catacttgct gtatgttgtg    1500
gatcagcaag tatagtcagc cctctacttg agcaaaatgt tgatgtatct tctcaagatc    1560
tggaaagacg gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact    1620
ttctgactac aaagaaaaac agatgttaaa aatctcttct gaaaacagca atccagaaca    1680
agacttaaag ctgacatcag aggaagagtc acaaaggctt aaaggaagtg aaaacagcca    1740
gccagaggca tggaaacttt taaatttaaa cttttggttt aatgtttttt tttttgcct    1800
taataatatt agatagtccc aaatgaaatw acctatgaga ctaggctttg agaatcaata    1860
gattcttttt ttaagaatct tttggctagg agcggtgtct cacgcctgta attccagcac    1920
cttgagaggc tgaggtgggc agatcacgag atcaggagat cgagaccatc ctggctaaca    1980
```

```
cggtgaaacc ccatctctac taaaaataca aaaacttagc tgggtgtggt ggcgggtgcc    2040
tgtagtccca gctactcagg argctgaggc aggagaatgg catgaacccg ggaggtggag    2100
gttgcagtga gccgagatcc gccactacac tccagcctgg gtgacagagc aagactctgt    2160
ctcaaaaaaa aaaaaaaaaa aaaa                                           2184
```

```
<210> 371
<211> 1855
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1855)
<223> n = A,T,C or G

<400> 371
tgcacgcatc ggccagtgtc tgtgccacgt acactgacgc cccctgagat gtgcacgccg      60
cacgcgcacg ttgcacgcgc ggcagcggct tggctggctt gtaacggctt gcacgcgcac     120
gccgcccccg cataaccgtc agactggcct gtaacggctt gcaggcgcac gccgcacgcg     180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgttaacggc     240
ttggctggca tgtagccgct tggcttggct ttgcattytt tgctkggctk ggcgttgkty     300
tcttggattg acgcttcctc cttggatkga cgtttcctcc ttggatkgac gtttcytyty     360
tcgcgttcct ttgctggact tgaccttty tctgctgggt ttggcattcc tttggggtgg     420
gctgggtgtt ttctccgggg gggktkgccc ttcctggggt gggcgtgggk cgcccccagg     480
gggcgtgggc tttccccggg tgggtgtggg ttttcctggg gtggggtggg ctgtgctggg     540
atcccctgc tggggttggc agggattgac ttttttcttc aaacagattg gaaacccgga     600
gtaacntgct agttggtgaa actggttggt agacgcgatc tgctggtact actgtttctc     660
ctggctgtta aaagcagatg gtggctgagg ttgattcaat gccggctgct tcttctgtga     720
agaagccatt tggtctcagg agcaagatgg gcaagtggtg cgccactgct tcccctgctg     780
caggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa     840
gacgcttggg agcaagaggt gcaagtggtg ctgcccactg cttcccctgc tgcaggggag     900
cggcaagagc aacgtggkcg cttggggaga ctacgatgac agcgccttca tggakcccag     960
gtaccacgtc crtggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt    1020
ccccagaaag gatctcatcg tcatgctcag ggacactgay gtgaacaaga rggacaagca    1080
aaagaggact gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt    1140
gctggacaga cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa    1200
ggccgtacaa tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc    1260
aaatattcca gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa    1320
attaatggcc aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaaggtata    1380
gatctactaa tttttatcttc aaaatactga aatgcattca ttttaacatt gacgtgtgta    1440
agggccagtc ttccgtattt ggaagctcaa gcataacttg aatgaaaata ttttgaaatg    1500
acctaattat ctaagacttt attttaaata ttgttatttt caaagaagca ttagagggta    1560
cagttttttt tttttaaatg cacttctggt aaatactttt gttgaaaaca ctgaatttgt    1620
aaaaggtaat acttactatt tttcaatttt tccctcctag gatttttttc ccctaatgaa    1680
tgtaagatgg caaaatttgc cctgaaatag gttttacatg aaaactccaa gaaaagttaa    1740
acatgtttca gtgaatagag atcctgctcc tttggcaagt tcctaaaaaa cagtaataga    1800
tacgaggtga tgcgcctgtc agtggcaagg tttaagatat ttctgatctc gtgcc         1855

<210> 372
<211> 1059
<212> DNA
```

<213> Homo sapien

<400> 372
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gcaacgtggg cacttctgga gaccacaacg actcctctgt gaagacgctt gggagcaaga      60
ggtgcaagtg gtgctgccca ctgcttcccc tgctgcaggg gagcggcaag agcaacgtgg     120
gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag     180
aagatctgga caagctccac agagctgccc tggtggggta aagtccccag aaaggatctc     240
atcgtcatgc tcagggacac tgaygtgaac aagarggaca agcaaaagag gactgctcta     300
catctggcct ctgccaatgg gaattcagaa gtagtaaaac tcstgctgga cagacgatgt     360
caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag     420
gaagatgaat gtgcgttaat gttgctggaa catggcactg atccaaatat tccagatgag     480
tatggaaata ccactctrca ctaygctrtc tayaatgaag ataaattaat ggccaaagca     540
ctgctcttat ayggtgctga tatcgaatca aaaaacaagg tatagatcta ctaatttat      600
cttcaaaata ctgaaatgca ttcattttaa cattgacgtg tgtaagggcc agtcttccgt     660
atttggaagc tcaagcataa cttgaatgaa aatattttga aatgacctaa ttatctaaga     720
ctttatttta aatattgtta ttttcaaaga agcattagag ggtacagttt ttttttttta     780
aatgcacttc tggtaaatac ttttgttgaa aacactgaat ttgtaaaagg taatacttac     840
tattttcaa ttttttccctc ctaggatttt tttcccctaa tgaatgtaag atggcaaaat     900
ttgccctgaa ataggtttta catgaaaact ccaagaaaag ttaaacatgt ttcagtgaat     960
agagatcctg ctcctttggc aagttcctaa aaaacagtaa tagatacgag gtgatgcgcc    1020
tgtcagtggc aaggtttaag atatttctga tctcgtgcc                          1059
```

<210> 373
<211> 1155
<212> DNA
<213> Homo sapien

<400> 373
```
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc      60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag     120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag     180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg     240
ggcgcttctg agaccacgac gactctgcta tgaagacac tcaggaacaa gatgggcaag     300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg     360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg     420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg     480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc     540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat     600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa     660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat     720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta     780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta     840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca     900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata     960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg    1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac    1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga    1140
accagaaata aataa                                                    1155
```

<210> 374
<211> 2000

```
<212> DNA
<213> Homo sapien

<400> 374
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc     60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag    120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag    180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg    240
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag    300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg    360
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg    420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg    480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc    540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat    600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa    660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat    720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta    780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta    840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca    900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata    960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg   1020
gccagagagt atgctgtttc tagtcatcat catgtaanttt gccagttact ttctgactac   1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag   1140
ctgacatcag aggaagagtc acaaaggttc aaaggcagtg aaaatagcca gccagagaaa   1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag   1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc   1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt   1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa   1440
aaacagatgc caaaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca   1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg ccagccaga gctagaaat    1560
tttatggcta tcgaagaaat gaagaagcac ggaagtactc atgtcggatt cccagaaaac   1620
ctgactaatg gtgccactgc tggcaatggt gatgatggat taattcctcc aaggaagagc   1680
agaacacctg aaagccagca atttcctgac actgagaatg aagagtatca cagtgacgaa   1740
caaaatgata ctcagaagca attttgtgaa gaacagaaca ctggaatatt acacgatgag   1800
attctgattc atgaagaaaa gcagatagaa gtggttgaaa aaatgaattc tgagctttct   1860
cttagttgta agaaagaaaa agacatcttg catgaaaata gtacgttgcg ggaagaaatt   1920
gccatgctaa gactggagct agacacaatg aaacatcaga gccagctaaa aaaaaaaaaa   1980
aaaaaaaaaa aaaaaaaaaa                                                2000

<210> 375
<211> 2040
<212> DNA
<213> Homo sapien

<400> 375
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc     60
aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag    120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag    180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg    240
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag    300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg    360
```

```
ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg    420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg    480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc    540
tctgccaatg ggaattcaga agtagtaaaa ctcctgctgg acagacgatg tcaacttaat    600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa    660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat    720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta    780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta    840
catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca    900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata    960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg   1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac   1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag   1140
ctgacatcag aggaagagtc acaaaggttc aaaggcagtg aaaatagcca gccagagaaa   1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag   1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc   1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt   1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa   1440
aaacagatgc caaaatactc ttctgaaaac agcaacccag aacaagactt aaagctgaca   1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg ccagccaga gaaaagatct   1560
caagaaccag aaataaataa ggatggtgat agagagctag aaaattttat ggctatcgaa   1620
gaaatgaaga gcacggaag tactcatgtc ggattcccag aaaacctgac taatggtgcc   1680
actgctggca atggtgatga tggattaatt cctccaagga gagcagaac acctgaaagc   1740
cagcaatttc ctgacactga gaatgaagag tatcacagtg acgaacaaaa tgatactcag   1800
aagcaatttt gtgaagaaca gaacactgga atattacacg atgagattct gattcatgaa   1860
gaaaagcaga tagaagtggt tgaaaaaatg aattctgagc tttctcttag ttgtaagaaa   1920
gaaaaagaca tcttgcatga aaatagtacg ttgcgggaag aaattgccat gctaagactg   1980
gagctagaca caatgaaaca tcagagccag ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa   2040
```

```
         <210> 376
         <211> 329
         <212> PRT
         <213> Homo sapien

         <400> 376
Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe
1               5                   10                  15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
            20                  25                  30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser
        35                  40                  45
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
    50                  55                  60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
65                  70                  75                  80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
                85                  90                  95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
            100                 105                 110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
        115                 120                 125
```

```
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
    130             135                 140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145                 150                 155                 160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
                165                 170                 175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
                180                 185                 190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
    195                 200                 205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
    210                 215                 220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225                 230                 235                 240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
                245                 250                 255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
                260                 265                 270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
    275                 280                 285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
    290                 295                 300
Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305                 310                 315                 320
Ser Met Leu Phe Leu Val Ile Ile Met
                325


        <210> 377
        <211> 148
        <212> PRT
        <213> Homo sapien

        <220>
        <221> VARIANT
        <222> (1)...(148)
        <223> Xaa = Any Amino Acid

        <400> 377
Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
1               5                   10                  15
Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
                20                  25                  30
Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys
            35                  40                  45
Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
    50                  55                  60
Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
65                  70                  75                  80
Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
                85                  90                  95
Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
```

```
                100                      105                      110
Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
        115                      120                      125
Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
        130                      135                      140
Lys Asn Lys Val
145


        <210> 378
        <211> 1719
        <212> PRT
        <213> Homo sapien


        <400> 378
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
  1               5                   10                      15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
        20                      25                      30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
        35                      40                      45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
        50                      55                      60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65                      70                      75                      80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                      90                      95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
        100                     105                     110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
        115                     120                     125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
        130                     135                     140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                     150                     155                     160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                     170                     175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
        180                     185                     190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195                     200                     205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
        210                     215                     220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                     230                     235                     240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
                245                     250                     255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
        260                     265                     270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
        275                     280                     285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
```

```
      290                     295                     300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                     310                     315                     320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                  325                     330                     335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
              340                     345                     350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
          355                     360                     365
Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
      370                     375                     380
Pro Arg Thr His Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser
385                     390                     395                     400
Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys
                  405                     410                     415
Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly
              420                     425                     430
Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys
          435                     440                     445
Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly
          450                     455                     460
Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys
465                     470                     475                     480
Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys
                  485                     490                     495
Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp
              500                     505                     510
Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu
          515                     520                     525
Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp
      530                     535                     540
Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln
545                     550                     555                     560
Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val
                  565                     570                     575
Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn
              580                     585                     590
Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu
          595                     600                     605
Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp
          610                     615                     620
Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys
625                     630                     635                     640
Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys
                  645                     650                     655
Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys
              660                     665                     670
Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala
          675                     680                     685
Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly
      690                     695                     700
```

```
Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser
705             710             715                     720
Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser
            725             730             735
His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln
            740             745             750
Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys
        755             760             765
Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser
    770             775             780
Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp
785             790             795                     800
Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly
            805             810             815
Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn
            820             825             830
Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe
    835             840             845
Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser
    850             855             860
Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn
865             870             875                     880
Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu
            885             890             895
Glu Gly Ser Glu Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile
            900             905             910
Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn
    915             920             925
Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro
    930             935             940
Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu
945             950             955                     960
Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe
            965             970             975
Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His
            980             985             990
Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser
    995             1000            1005
Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu
    1010            1015            1020
Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His
1025            1030            1035            104
Gln Ser Gln Leu Pro Arg Thr His Met Val Val Glu Val Asp Ser Met
            1045            1050            1055
Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met
            1060            1065            1070
Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys
    1075            1080            1085
Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr
    1090            1095            1100
Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
```

```
1105                    1110                    1115                    112
Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp
                    1125                    1130                    1135
Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His
                1140                    1145                    1150
Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val Gly Ala Trp
            1155                    1160                    1165
Gly Asp Tyr Asp Asp Ser Ala Phe Met Glu Pro Arg Tyr His Val Arg
        1170                    1175                    1180
Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val
1185                    1190                    1195                    120
Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys
                    1205                    1210                    1215
Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly
                1220                    1225                    1230
Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn
            1235                    1240                    1245
Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys
        1250                    1255           .        1260
Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro
1265                    1270                    1275                    128
Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr
                    1285                    1290                    1295
Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp
                1300                    1305                    1310
Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val
            1315                    1320                    1325
His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala
        1330                    1335           ·         1340
Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
1345                    1350                    1355                    136
Val Cys Cys Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn
                    1365                    1370                    1375
Ile Asp Val Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr
                1380                    1385                    1390
Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr
            1395                    1400                    1405
Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu
        1410                    1415                    1420
Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Phe Lys Gly
1425                    1430                    1435                    144
Ser Glu Asn Ser Gln Pro Glu Lys Met Ser Gln Glu Pro Glu Ile Asn
                    1445                    1450                    1455
Lys Asp Gly Asp Arg Glu Val Glu Glu Glu Met Lys Lys His Glu Ser
                1460                    1465                    1470
Asn Asn Val Gly Leu Leu Glu Asn Leu Thr Asn Gly Val Thr Ala Gly
            1475                    1480                    1485
Asn Gly Asp Asn Gly Leu Ile Pro Gln Arg Lys Ser Arg Thr Pro Glu
        1490                    1495                    1500
Asn Gln Gln Phe Pro Asp Asn Glu Ser Glu Glu Tyr His Arg Ile Cys
1505                    1510                    1515                    152
```

```
Glu Leu Val Ser Asp Tyr Lys Glu Lys Gln Met Pro Lys Tyr Ser Ser
              1525                1530                1535
Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu Glu Glu
              1540                1545                1550
Ser Gln Arg Leu Glu Gly Ser Glu Asn Gly Gln Pro Glu Lys Arg Ser
          1555                1560                1565
Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Leu Glu Asn Phe
      1570                1575                1580
Met Ala Ile Glu Glu Met Lys Lys His Gly Ser Thr His Val Gly Phe
1585                1590                1595                160
Pro Glu Asn Leu Thr Asn Gly Ala Thr Ala Gly Asn Gly Asp Asp Gly
              1605                1610                1615
Leu Ile Pro Pro Arg Lys Ser Arg Thr Pro Glu Ser Gln Gln Phe Pro
              1620                1625                1630
Asp Thr Glu Asn Glu Glu Tyr His Ser Asp Glu Gln Asn Asp Thr Gln
          1635                1640                1645
Lys Gln Phe Cys Glu Glu Gln Asn Thr Gly Ile Leu His Asp Glu Ile
      1650                1655                1660
Leu Ile His Glu Glu Lys Gln Ile Glu Val Val Glu Lys Met Asn Ser
1665                1670                1675                168
Glu Leu Ser Leu Ser Cys Lys Lys Glu Lys Asp Ile Leu His Glu Asn
              1685                1690                1695
Ser Thr Leu Arg Glu Glu Ile Ala Met Leu Arg Leu Glu Leu Asp Thr
          1700                1705                1710
Met Lys His Gln Ser Gln Leu
      1715


      <210> 379
      <211> 656
      <212> PRT
      <213> Homo sapien


      <400> 379
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1               5               10              15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
          20              25              30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
      35              40              45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
      50              55              60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65              70              75              80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
              85              90              95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
          100             105             110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
      115             120             125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
      130             135             140
```

```
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145             150             155                     160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
            165             170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180             185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
        195             200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210             215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225             230                 235                     240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
            245             250                 255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
            260             265                 270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
    275             280                 285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
    290             295                 300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305             310                 315                     320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
            325             330                 335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
            340             345                 350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
        355             360                 365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
    370             375                 380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385             390                 395                     400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
            405             410                 415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
            420             425                 430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
    435             440                 445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
    450             455                 460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465             470                 475                     480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
            485             490                 495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
            500             505                 510
Asn Gly Gln Pro Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys
            515             520                 525
Lys His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly
            530             535                 540
Ala Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser
```

```
545                    550                    555                    560
Arg Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr
                565                    570                    575
His Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln
            580                    585                    590
Asn Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln
            595                    600                    605
Ile Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys
    610                    615                    620
Lys Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile
625                    630                    635                    640
Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
                645                    650                    655
```

<210> 380
<211> 671
<212> PRT
<213> Homo sapien

<400> 380

```
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1                   5                   10                  15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
                20                  25                  30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
            35                  40                  45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
    50                  55                  60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65                  70                  75                  80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
                85                  90                  95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
                100                 105                 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
            115                 120                 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
    130                 135                 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145                 150                 155                 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
                165                 170                 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
            180                 185                 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
            195                 200                 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
    210                 215                 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225                 230                 235                 240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
```

```
                245                     250                     255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
                260                     265                     270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
                275                     280                     285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
                290                     295                     300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305                     310                     315                     320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
                        325                     330                     335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
                340                     345                     350
Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
                355                     360                     365
Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
370                     375                     380
Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
385                     390                     395                     400
Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
                405                     410                     415
Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
                420                     425                     430
Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
                435                     440                     445
Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
                450                     455                     460
Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
465                     470                     475                     480
Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
                485                     490                     495
Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
                500                     505                     510
Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
                515                     520                     525
Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
                530                     535                     540
His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
545                     550                     555                     560
Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
                565                     570                     575
Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
                580                     585                     590
Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
                595                     600                     605
Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
                610                     615                     620
Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
625                     630                     635                     640
Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
                        645                     650                     655
```

```
Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
            660                   665                   670
```

<210> 381
<211> 251
<212> DNA
<213> Homo sapien

<400> 381

```
ggagaagcgt ctgctggggc aggaaggggt ttccctgccc tctcacctgt ccctcaccaa       60
ggtaacatgc ttcccctaag ggtatcccaa cccaggggcc tcaccatgac ctctgagggg      120
ccaatatccc aggagaagca ttggggagtt gggggcaggt gaaggaccca ggactcacac      180
atcctgggcc tccaaggcag aggagagggt cctcaagaag gtcaggagga aaatccgtaa      240
caagcagtca g                                                           251
```

<210> 382
<211> 3279
<212> DNA
<213> Homo sapiens

<400> 382

```
cttcctgcag cccccatgct ggtgaggggc acgggcagga acagtggacc caacatggaa 60
atgctggagg gtgtcaggaa gtgatcgggc tctggggcag ggaggagggg tggggagtgt 120
cactgggagg ggacatcctg cagaaggtag gagtgagcaa acacccgctg caggggaggg 180
gagagccctg cggcacctgg gggagcagag ggagcagcac ctgcccaggc ctgggaggag 240
gggcctggag ggcgtgagga ggagcgaggg ggctgcatgg ctggagtgag ggatcagggg 300
cagggcgcga gatggcctca cacaggaag agagggcccc tcctgcaggg cctcacctgg 360
gccacaggag gacactgctt ttcctctgag gagtcaggag ctgtggatgg tgctggacag 420
aagaaggaca gggcctggct caggtgtcca gaggctgtcg ctggcttccc tttgggatca 480
gactgcaggg agggagggcg gcagggttgt ggggggagtg acgatgagga tgacctgggg 540
gtggctccag gccttgcccc tgcctgggcc ctcacccagc ctccctcaca gtctcctggc 600
cctcagtctc tcccctccac tccatcctcc atctggcctc agtgggtcat tctgatcact 660
gaactgacca tacccagccc tgcccacggc cctccatggc tccccaatgc cctggagagg 720
ggacatctag tcagagagta gtcctgaaga ggtggcctct cgatgtgcc tgtgggggca 780
gcatcctgca gatggtcccg gccctcatcc tgctgacctg tctgcaggga ctgtcctcct 840
ggaccttgcc ccttgtgcag gagctggacc ctgaagtccc ctccccatag gccaagactg 900
gagccttgtt ccctctgttg gactccctgc ccatattctt gtgggagtgg gttctggaga 960
catttctgtc tgttcctgag agctgggaat tgctctcagt catctgcctg cgcggttctg 1020
agagatggag ttgcctaggc agttattggg gccaatcttt ctcactgtgt ctctcctcct 1080
ttacccttag ggtgattctg ggggtccact tgtctgtaat ggtgtgcttc aaggtatcac 1140
atcatggggc cctgagccat gtgccctgcc tgaaaagcct gctgtgtaca ccaaggtggt 1200
gcattaccgg aagtggatca aggacaccat cgcagccaac ccctgagtgc ccctgtccca 1260
cccctacctc tagtaaattt aagtccacct cacgttctgg catcacttgg cctttctgga 1320
tgctggacac ctgaagcttg gaactcacct ggccgaagct cgagcctcct gagtcctact 1380
gacctgtgct ttctggtgtg gagtccaggg ctgctaggaa aaggaatggg cagacacagg 1440
tgtatgccaa tgtttctgaa atgggtataa tttcgtcctc tccttcggaa cactggctgt 1500
ctctgaagac ttctcgctca gtttcagtga ggacacacac aaagacgtgg gtgaccatgt 1560
tgtttgtggg gtgcagagat gggaggggtg gggcccaccc tggaagagtg acagtgaca 1620
caaggtggac actctctaca gatcactgag gataagctgg agccacaatg catgaggcac 1680
acacacagca aggttgacgc tgtaaacata gcccacgctg tcctgggggc actgggaagc 1740
ctagataagg ccgtgagcag aaagaagggg aggatcctcc tatgttgttg aaggagggac 1800
```

```
taggggggaga aactgaaagc tgattaatta caggaggttt gttcaggtcc cccaaaccac 1860
cgtcagattt gatgatttcc tagcaggact tacagaaata aagagctatc atgctgtggt 1920
ttattatggt ttgttacatt gataggatac atactgaaat cagcaaacaa aacagatgta 1980
tagattagag tgtggagaaa acagaggaaa acttgcagtt acgaagactg gcaacttggc 2040
tttactaagt tttcagactg gcaggaagtc aaacctatta ggctgaggac cttgtggagt 2100
gtagctgatc cagctgatag aggaactagc caggtggggg cctttccctt tggatggggg 2160
gcatatccga cagttattct ctccaagtgg agacttacgg acagcatata attctccctg 2220
caaggatgta tgataatatg tacaaagtaa ttccaactga ggaagctcac ctgatcctta 2280
gtgtccaggg tttttactgg gggtctgtag gacgagtatg gagtacttga ataattgacc 2340
tgaagtcctc agacctgagg ttccctagag ttcaaacaga tacagcatgg tccagagtcc 2400
cagatgtaca aaaacaggga ttcatcacaa atcccatctt tagcatgaag ggtctggcat 2460
ggcccaaggc cccaagtata tcaaggcact tgggcagaac atgccaagga atcaaatgtc 2520
atctcccagg agttattcaa gggtgagccc tttacttggg atgtacaggc tttgagcagt 2580
gcagggctgc tgagtcaacc tttttattgta cagggggatga gggaaaggga gaggatgagg 2640
aagcccccct ggggatttgg tttggtcttg tgatcaggtg gtctatgggg ctatccctac 2700
aaagaagaat ccagaaatag gggcacattg aggaatgata ctgagcccaa agagcattca 2760
atcattgttt tatttgcctt cttttcacac cattggtgag ggagggatta ccaccctggg 2820
gttatgaaga tggttgaaca ccccacacat agcaccggag atatgagatc aacagtttct 2880
tagccataga gattcacagc ccagagcagg aggacgctgc acaccatgca ggatgacatg 2940
ggggatgcgc tcgggattgg tgtgaagaag caaggactgt tagaggcagg ctttatagta 3000
acaagacggt ggggcaaact ctgatttccg tgggggaatg tcatggtctt gctttactaa 3060
gttttgagac tggcaggtag tgaaactcat taggctgaga accttgtgga atgcagctga 3120
cccagctgat agaggaagta gccaggtggg agcctttccc agtgggtgtg ggacatatct 3180
ggcaagattt tgtggcactc ctggttacag atactggggc agcaaataaa actgaatctt 3240
gttttcagac cttaaaaaaa aaaaaaaaaa aaagtttt                           3279
```

<210> 383
<211> 154
<212> PRT
<213> Homo sapiens

<400> 383
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Met Ala Gly Val Arg Asp Gln Gly Gln Gly Ala Arg Trp Pro His Thr
                5                  10                  15

Gly Lys Arg Gly Pro Leu Leu Gln Gly Leu Thr Trp Ala Thr Gly Gly
            20                  25                  30

His Cys Phe Ser Ser Glu Glu Ser Gly Ala Val Asp Gly Ala Gly Gln
        35                  40                  45

Lys Lys Asp Arg Ala Trp Leu Arg Cys Pro Glu Ala Val Ala Gly Phe
    50                  55                  60

Pro Leu Gly Ser Asp Cys Arg Glu Gly Gly Arg Gln Gly Cys Gly Gly
65                  70                  75                  80

Ser Asp Asp Glu Asp Asp Leu Gly Val Ala Pro Gly Leu Ala Pro Ala
                85                  90                  95

Trp Ala Leu Thr Gln Pro Pro Ser Gln Ser Pro Gly Pro Gln Ser Leu
```

```
                  100                    105                    110
```

Pro Ser Thr Pro Ser Ser Ile Trp Pro Gln Trp Val Ile Leu Ile Thr
     115   120   125

Glu Leu Thr Ile Pro Ser Pro Ala His Gly Pro Pro Trp Leu Pro Asn
    130   135   140

Ala Leu Glu Arg Gly His Leu Val Arg Glu
145   150

<210> 384
<211> 557
<212> DNA
<213> Homo sapiens

<400> 384
ggatcctcta gagcggccgc ctactactac taaattcgcg gccgcgtcga cgaagaagag 60
aaagatgtgt tttgtttтgg actctctgtg gtcccttcca atgctgtggg tttccaacca 120
ggggaagggt cccttttgca ttgccaagtg ccataaccat gagcactact ctaccatggt 180
tctgcctcct ggccaagcag gctggtttgc aagaatgaaa tgaatgattc tacagctagg 240
acttaacctt gaaatggaaa gtcttgcaat cccatttgca ggatccgtct gtgcacatgc 300
ctctgtagag agcagcattc ccagggacct tggaaacagt tggcactgta aggtgcttgc 360
tccccaagac acatcctaaa aggtgttgta atggtgaaaa cgtcttcctt ctttattgcc 420
ccttcttatt tatgtgaaca actgtttgtc ttttтttgta tcttttttaa actgtaaagt 480
tcaattgtga aaatgaatat catgcaaata aattatgcga ttttтttтtc aaagtaaaaa 540
aaaaaaaaaa aaaaaaa 557

<210> 385
<211> 337
<212> DNA
<213> Homo sapiens

<400> 385
ttcccaggtg atgtgcgagg gaagacacat ttactatcct tgatggggct gattccttta 60
gtttctctag cagcagatgg gttaggagga agtgacccaa gtggttgact cctatgtgca 120
tctcaaagcc atctgctgtc ttcgagtacg gacacatcat cactcctgca ttgttgatca 180
aaacgtggag gtgcttttcc tcagctaaga agcccttagc aaaagctcga atagacttag 240
tatcagacag gtccagtttc cgcaccaaca cctgctggtt ccctgtcgtg gtctggatct 300
ctttggccac caattccccc ttttccacat cccggca 337

<210> 386
<211> 300
<212> DNA
<213> Homo sapiens

<400> 386
gggcccgcta ccggcccagg ccccgcctcg cgagtcctcc tccccgggtg cctgcccgca 60
gcccgctcgg cccagagggt gggcgcgggg ctgcctctac cggctggcgg ctgtaactca 120
gcgaccttgg cccgaaggct ctagcaagga cccaccgacc ccagccgcgg cggcggcggc 180
```

```
gcggactttg cccggtgtgt ggggcggagc ggactgcgtg tccgcggacg ggcagcgaag 240
atgttagcct tcgctgccag gaccgtggac cgatcccagg gctgtggtgt aacctcagcc 300
```

<210> 387
<211> 537
<212> DNA
<213> Homo sapiens

<400> 387
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gggccgagtc gggcaccaag ggactctttg caggcttcct tcctcggatc atcaaggctg 60
ccccctcctg tgccatcatg atcagcacct atgagttcgg caaaagcttc ttccagaggc 120
tgaaccagga ccggcttctg ggcggctgaa aggggcaagg aggcaaggac cccgtctctc 180
ccacggatgg ggagagggca ggaggagacc cagccaagtg ccttttcctc agcactgagg 240
gaggggggctt gtttcccttc cctcccggcg acaagctcca gggcagggct gtccctctgg 300
gcggcccagc acttcctcag acacaacttc ttcctgctgc tccagtcgtg gggatcatca 360
cttacccacc ccccaagttc aagaccaaat cttccagctg cccccttcgt gtttccctgt 420
gtttgctgta gctgggcatg tctccaggaa ccaagaagcc ctcagcctgg tgtagtctcc 480
ctgacccttg ttaattcctt aagtctaaag atgatgaact tcaaaaaaaa aaaaaaa 537
```

<210> 388
<211> 520
<212> DNA
<213> Homo sapiens

<400> 388
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aggataattt ttaaaccaat caaatgaaaa aaacaaacaa acaaaaaagg aaatgtcatg 60
tgaggttaaa ccagtttgca ttcccctaat gtggaaaaag taagaggact actcagcact 120
gtttgaagat tgcctcttct acagcttctg agaattgtgt tatttcactt gccaagtgaa 180
ggacccccctc cccaacatgc cccagcccac ccctaagcat ggtcccttgt caccaggcaa 240
ccaggaaact gctacttgtg gacctcacca gagaccagga gggtttggtt agctcacagg 300
acttccccca ccccagaaga ttagcatccc atactagact catactcaac tcaactaggc 360
tcatactcaa ttgatggtta ttagacaatt ccatttcttt ctggttatta taaacagaaa 420
atctttcctc ttctcattac cagtaaaggc tcttggtatc tttctgttgg aatgatttct 480
atgaacttgt cttattttaa tggtgggttt tttttctggt 520
```

<210> 389
<211> 365
<212> DNA
<213> Homo sapiens

<400> 389
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cgttgcccca gtttgacaga aggaaaggcg gagcttattc aaagtctaga gggagtggag 60
gagttaaggc tggatttcag atctgcctgg ttccagccgc agtgtgccct ctgctccccc 120
aacgactttc caaataatct caccagcgcc ttccagctca ggcgtcctag aagcgtcttg 180
aagcctatgg ccagctgtct ttgtgttccc tctcacccgc ctgtcctcac agctgagact 240
cccaggaaac cttcagacta ccttcctctg ccttcagcaa ggggcgttgc ccacattctc 300
tgagggtcag tggaagaacc tagactccca ttgctagagg tagaaagggg aagggtgctg 360
gggag 365
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<210> 390
<211> 221

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(221)
<223> n = A,T,C or G

<400> 390
tgcctctcca tcctggcccc gacttctctg tcaggaaagt ggggatggac cccatctgca 60
tacacggntt ctcatgggtg tggaacatct ctgcttgcgg tttcaggaag gcctctggct 120
gctctangag tctgancnga ntcgttgccc cantntgaca naaggaaagg cggagcttat 180
tcaaagtcta gagggagtgg aggagttaag gctggatttc a 221

<210> 391
<211> 325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(325)
<223> n = A,T,C or G

<400> 391
tggagcaggt cccgaggcct ccctagagcc tggggccgac tctgtgncga tgcangcttt 60
ctctcgcgcc cagcctggag ctgctcctgg catctaccaa caatcagncg aggcgagcag 120
tagccagggc actgctgcca acagccagtc cnnataccat catgtnaccc ggtgngctct 180
naanttngat ntccanagcc ctacccatcn tagttctgct ctcccaccgg ntaccagccc 240
cactgcccag gaatcctaca gccagtaccc tgtcccgacg tctctaccta ccagtacgat 300
gagacctccg gctactacta tgacc 325

<210> 392
<211> 277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 392
atattgttta actccttcct ttatatcttt taacattttc atggngaaag gttcacatct 60
agtctcactt nggcnagngn ctcctacttg agtctcttcc ccggcctgnn ccagtngnaa 120
antaccanga accgncatgn cttaanaacn ncctggtttn tgggttnntc aatgactgca 180
tgcagtgcac caccctgtcc actacgtgat gctgtaggat taaagtctca cagtgggcgg 240
ctgaggatac agcgccgcgt cctgtgttgc tggggaa 277

<210> 393
<211> 566

<212> DNA
<213> Homo sapiens

<400> 393
actagtccag tgtggtggaa ttcgcggccg cgtcgacgga caggtcagct gtctggctca 60
gtgatctaca ttctgaagtt gtctgaaaat gtcttcatga ttaaattcag cctaaacgtt 120
ttgccgggaa cactgcagag acaatgctgt gagtttccaa ccttagccca tctgcgggca 180
gagaaggtct agtttgtcca tcagcattat catgatatca ggactggtta cttggttaag 240
gaggggtcta ggagatctgt ccctttaga gacaccttac ttataatgaa gtatttggga 300
gggtggtttt caaaagtaga aatgtcctgt attccgatga tcatcctgta aacattttat 360
catttattaa tcatccctgc ctgtgtctat tattatattc atatctctac gctggaaact 420
ttctgcctca atgtttactg tgcctttgtt tttgctagtt tgtgttgttg aaaaaaaaaa 480
cattctctgc ctgagtttta attttgtcc aaagttattt taatctatac aattaaaagc 540
ttttgcctat caaaaaaaaa aaaaaa 566

<210> 394
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(384)
<223> n = A,T,C or G

<400> 394
gaacatacat gtcccggcac ctgagctgca gtctgacatc atcgccatca cgggcctcgc 60
tgcaaattng gaccgggcca aggctggact gctggagcgt gtgaaggagc tacaggccna 120
gcaggaggac cgggctttaa ggagttttaa gctgagtgtc actgtagacc ccaaataccca 180
tcccaagatt atcgggagaa aggggggcagt aattacccaa atccggttgg agcatgacgt 240
gaacatccag tttcctgata aggacgatgg gaaccagccc caggaccaaa ttaccatcac 300
agggtacgaa aagaacacag aagctgccag ggatgctata ctgagaattg tgggtgaact 360
tgagcagatg gtttctgagg acgt 384

<210> 395
<211> 399
<212> DNA
<213> Homo sapiens

<400> 395
ggcaaaactg tgtgacctca ataagacctc gcagatccaa ggtcaagtat cagaagtgac 60
tctgaccttg gactccaaga cctacatcaa cagcctggct atattagatg atgagccagt 120
tatcagaggt ttcatcattg cggaaattgt ggagtctaag gaaatcatgg cctctgaagt 180
attcacgtct ttccagtacc ctgagttctc tatagagttg cctaacacag gcagaattgg 240
ccagctactt gtctgcaatt gtatcttcaa gaatacccctg gccatccctt tgactgacgt 300
caagttctct ttggaaagcc tgggcatctc ctcactacag acctctgacc atgggacggt 360
gcagcctggt gagaccatcc aatcccaaat aaaatgcac 399

<210> 396
<211> 403
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(403)
<223> n = A,T,C or G

<400> 396
tggagttntc agtgcaaaca agccataaag cttcagtagc aaattactgt ctcacagaaa 60
gacattttca acttctgctc cagctgctga taaaacaaat catgtgttta gcttgactcc 120
agacaaggac aacctgttcc ttcataactc tctagagaaa aaaaggagtt gttagtagat 180
actaaaaaaa gtggatgaat aatctggata tttttcctaa aaagattcct tgaaacacat 240
taggaaaatg gagggcctta tgatcagaat gctagaatta gtccattgtg ctgaagcagg 300
gtttagggga gggagtgagg gataaaagaa ggaaaaaaag aagagtgaga aaacctattt 360
atcaaagcag gtgctatcac tcaatgttag gccctgctct ttt 403

<210> 397
<211> 100
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(100)
<223> n = A,T,C or G

<400> 397
actagtncag tgtggtggaa ttcgcggccg cgtcgaccta naanccatct ctatagcaaa 60
tccatccccg ctcctggttg gtnacagaat gactgacaaa 100

<210> 398
<211> 278
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 398
gcggccgcgt cgacagcagt tccgccagcg ctcgcccctg ggtggggatg tgctgcacgc 60
ccacctggac atctggaagt cagcggcctg gatgaaagag cggacttcac ctggggcgat 120
tcactactgt gcctcgacca gtgaggagag ctggaccgac agcgaggtgg actcatcatg 180
ctccgggcag cccatccacc tgtggcagtt cctcaaggag ttgctactca agccccacag 240
ctatggccgc ttcattangt ggctcaacaa ggagaagg 278

<210> 399
<211> 298
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(298)
<223> n = A,T,C or G

<400> 399
acggaggtgg aggaagcgnc cctgggatcg anaggatggg tcctgncatt gaccncctcn 60
ggggtgccng catggagcgc atgggcgcgg gcctgggcca cggcatggat cgcgtgggct 120
ccgagatcga gcgcatgggc ctggtcatgg accgcatggg ctccgtggag cgcatgggct 180
ccggcattga gcgcatgggc ccgctgggcc tcgaccacat ggcctccanc attgancgca 240
tgggccagac catggagcgc attggctctg gcgtggagcn catgggtgcc ggcatggg 298

<210> 400
<211> 548
<212> DNA
<213> Homo sapiens

<400> 400
acatcaacta cttcctcatt ttaaggtatg gcagttccct tcatcccctt ttcctgcctt 60
gtacatgtac atgtatgaaa tttccttctc ttaccgaact ctctccacac atcacaaggt 120
caaagaacca cacgcttaga agggtaagag ggcaccctat gaaatgaaat ggtgatttct 180
tgagtctctt ttttccacgt ttaaggggcc atggcaggac ttagagttgc gagttaagac 240
tgcagagggc tagagaatta tttcatacag gctttgaggc cacccatgtc acttatcccg 300
tatccctct caccatcccc ttgtctactc tgatgccccc aagatgcaac tgggcagcta 360
gttggcccca taattctggg cctttgttgt ttgttttaat tacttgggca tcccaggaag 420
ctttccagtg atctcctacc atgggccccc ctcctgggat caagcccctc ccaggccctg 480
tccccagccc ctcctgcccc agcccacccg cttgccttgg tgctcagccc tcccattggg 540
agcaggtt 548

<210> 401
<211> 355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(355)
<223> n = A,T,C or G

<400> 401
actgtttcca tgttatgttt ctacacattg ctacctcagt gctcctggaa acttagcttt 60
tgatgtctcc aagtagtcca ccttcattta actctttgaa actgtatcat ctttgccaag 120
taagagtggt ggcctatttc agctgctttg acaaaatgac tggctcctga cttaacgttc 180
tataaatgaa tgtgctgaag caaagtgccc atggtggcgg cgaagaagan aaagatgtgt 240
tttgttttgg actctctgtg gtcccttcca atgctgnggg tttccaacca ggggaagggt 300
cccttttgca ttgccaagtg ccataaccat gagcactact ctaccatggn tctgc 355

<210> 402
<211> 407
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(407)
<223> n = A,T,C or G

<400> 402
atggggcaag ctggataaag aaccaagacc cactggagta tgctgtcttc aagaaaccca 60
tctcacatgc ggtggcatac ataggctcaa aataaaggaa tggagaaaaa tatttcaagc 120
aaatggaaaa cagaaaaaag caggtgttgc actcctactt tctgacaaaa cagactatgc 180
gaataaagat aaaaaagaga aggacattac aaaggtggtc ctgacctttg ataaatctca 240
ttgcttgata ccaacctggg ctgttttaat tgcccaaacc aaaaggataa tttgctgagg 300
ttgtggagct tctcccctgc agagagtccc tgatctccca aaatttggtt gagatgtaag 360
gntgattttg ctgacaactc cttttctgaa gttttactca tttccaa 407

<210> 403
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 403
cagtatttat agccnaactg aaaagctagt agcaggcaag tctcaaatcc aggcaccaaa 60
tcctaagcaa gagccatggc atggtgaaaa tgcaaaagga gagtctggcc aatctacaaa 120
tagagaacaa gacctactca gtcatgaaca aaaaggcaga caccaacatg gatctcatgg 180
gggattggat attgtaatta tagagcagga agatgacagt gatcgtcatt tggcacaaca 240
tcttaacaac gaccgaaacc cattatttac ataaacctcc attcggtaac catgttgaaa 300
gga 303

<210> 404
<211> 225
<212> DNA
<213> Homo sapiens

<400> 404
aagtgtaact tttaaaaatt tagtggattt tgaaaattct tagaggaaag taaaggaaaa 60
attgttaatg cactcattta cctttacatg gtgaaagttc tctcttgatc ctacaaacag 120
acattttcca ctcgtgtttc catagttgtt aagtgtatca gatgtgttgg gcatgtgaat 180
ctccaagtgc ctgtgtaata aataaagtat ctttatttca ttcat 225

<210> 405
<211> 334
<212> DNA
<213> Homo sapiens

<220>

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<221> misc_feature
<222> (1)...(334)
<223> n = A,T,C or G


<400> 405
gagctgttat actgtgagtt ctactaggaa atcatcaaat ctgagggttg tctggaggac 60
ttcaatacac ctccccccat agtgaatcag cttccagggg gtccagtccc tctccttact 120
tcatccccat cccatgccaa aggaagaccc tccctccttg gctcacagcc ttctctaggc 180
ttcccagtgc ctccaggaca gagtgggtta tgttttcagc tccatccttg ctgtgagtgt 240
ctggtgcggt tgtgcctcca gcttctgctc agtgcttcat ggacagtgtc cagcccatgt 300
cactctccac tctctcanng tggatcccac ccct                          334


<210> 406
<211> 216
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G


<400> 406
tttcatacct aatgagggag ttganatnac atnnaaccag gaaatgcatg gatctcaang 60
gaaacaaaca cccaataaac tcggagtggc agactgacaa ctgtgagaca tgcacttgct 120
acnaaacaca aatttnatgt tgcacccttg tttctacacc tgtgggttat gacaaagaca 180
actgccaaag aatnttcaag aaggaggact gccant                        216


<210> 407
<211> 413
<212> DNA
<213> Homo sapiens


<400> 407
gctgacttgc tagtatcatc tgcattcatt gaagcacaag aacttcatgc cttgactcat 60
gtaaatgcaa taggattaaa aaataaattt gatatcacat ggaaacagac aaaaaatatt 120
gtacaacatt gcacccagtg tcagattcta cacctggcca ctcaggaagc aagagttaat 180
cccagaggtc tatgtcctaa tgtgttatgg caaatggatg tcatgcacgt accttcattt 240
ggaaaattgt catttgtcca tgtgacagtt gatacttatt cacatttcat atgggcaacc 300
tgccagacag gagaaagtct tcccatgtta aaagacattt attatcttgt tttcctgtca 360
tgggagttcc agaaaaagtt aaaacagaca atgggccagg ttctgtagta aag      413


<210> 408
<211> 183
<212> DNA
<213> Homo sapiens


<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G
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<400> 408
ggagctngcc ctcaattcct ccatntctat gttancatat ttaatgtctt ttgnnattaa 60
tncttaacta gttaatcctt aaagggctan ntaatcctta actagtccct ccattgtgag 120
cattatcctt ccagtattcn ccttctnttt tatttactcc ttcctggcta cccatgtact 180
ntt   183

<210> 409
<211> 250
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> n = A,T,C or G

<400> 409
cccacgcatg ataagctctt tatttctgta agtcctgcta ggaaatcatc aaatctgacg 60
gtggtttggg ggacctgaac aaacctcctg taattaatca gctttcagtt tctcccccta 120
gtccctcctt caacaacata ggaggatcct ccccttcttt ctgctcacgg ccttatctag 180
gcttcccagt gcccccagga cagcgtgggc tatgtttaca gcgcntcctt gctggggggg 240
ggccntatgc   250

<210> 410
<211> 306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(306)
<223> n = A,T,C or G

<400> 410
ggctggtttg caagaatgaa atgaatgatt ctacagctag gacttaacct tgaaatggaa 60
agtcttgcaa tcccatttgc aggatccgtc tgtgcacatg cctctgtaga gagcagcatt 120
cccagggacc ttggaaacag ttggcactgt aaggtgcttg ctccccaaga cacatcctaa 180
aaggtgttgt aatggtgaaa accgcttcct tctttattgc cccttcttat ttatgtgaac 240
nactggttgg cttttttttgn atctttttta aactggaaag ttcaattgng aaaatgaata 300
tcntgc   306

<210> 411
<211> 261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 411
agagatattn cttaggtnaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatctttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggngaggcaa a   261

<210> 412
<211> 241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G

<400> 412
gttcaatgtt acctgacatt tctacaacac cccactcacc gatgtattcg ttgcccagtg 60
ggaacatacc agcctgaatt tggaaaaaat aattgtgttt cttgcccagg aaatactacg 120
actgactttg atggctccac aaacataacc cagtgtaaaa acagaagatg tggagggggag 180
ctgggagatt tcactgggta cattgaattc ccaaactacc cangcaatta cccagccaac 240
a   241

<210> 413
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 413
aactcttaca atccaagtga ctcatctgtg tgcttgaatc ctttccactg tctcatctcc 60
ctcatccaag tttctagtac cttctctttg ttgtgaagga taatcaaact gaacaacaaa 120
aagtttactc tcctcatttg gaacctaaaa actctcttct tcctgggtct gagggctcca 180
agaatccttg aatcanttct cagatcattg gggacaccan atcaggaacc t   231

<210> 414
<211> 234
<212> DNA
<213> Homo sapiens

<400> 414
actgtccatg aagcactgag cagaagctgg aggcacaacg caccagacac tcacagcaag 60
gatggagctg aaaacataac ccactctgtc ctggaggcac tgggaagcct agagaaggct 120
gtgagccaag gagggagggt cttcctttgg catgggatgg ggatgaagta aggagaggga 180
ctggacccc tggaagctga ttcactatgg ggggaggtgt attgaagtcc tcca   234

<210> 415
<211> 217
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

<400> 415
gcataggatt aagactgagt atcttttcta cattctttta actttctaag gggcacttct 60
caaaacacag accaggtagc aaatctccac tgctctaagg ntctcaccac cactttctca 120
cacctagcaa tagtagaatt cagtcctact tctgaggcca gaagaatggt tcagaaaaat 180
antggattat aaaaaataac aattaagaaa aataatc 217

<210> 416
<211> 213
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 416
atgcatatnt aaagganact gcctcgcttt tagaagacat ctggnctgct ctctgcatga 60
ggcacagcag taaagctctt tgattcccag aatcaagaac tctccccttc agactattac 120
cgaatgcaag gtggttaatt gaaggccact aattgatgct caaatagaag gatattgact 180
atattggaac agatggagtc tctactacaa aag 213

<210> 417
<211> 303
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(303)
<223> n = A,T,C or G

<400> 417
nagtcttcag gcccatcagg gaagttcaca ctggagagaa gtcatacata tgtactgtat 60
gtgggaaagg ctttactctg agttcaaatc ttcaagccca tcagagagtc cacactggag 120
agaagccata caaatgcaat gagtgtggga agagcttcag gagggattcc cattatcaag 180
ttcatctagt ggtccacaca ggagagaaac cctataaatg tgagatatgt gggaagggct 240
tcantcaaag ttcgtatctt caaatccatc ngaaggncca cagtatanan aaacctttta 300
agt 303

<210> 418
<211> 328
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 418
ttttttggcgg tggtggggca gggacgggac angagtctca ctctgttgcc caggctggag 60
tgcacaggca tgatctcggc tcactacaac ccctgcctcc catgtccaag cgattcttgt 120
gcctcagcct tccctgtagc tagaattaca ggcacatgcc accacaccca gctagttttt 180
gtatttttag tagagacagg gtttcaccat gttggccagg ctggtctcaa actcctnacc 240
tcagnggtca ggctggtctc aaactcctga cctcaagtga tctgcccacc tcagcctccc 300
aaagtgctan gattacaggc cgtgagcc   328

<210> 419
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(389)
<223> n = A,T,C or G

<400> 419
cctcctcaag acggcctgtg gtccgcctcc cggcaaccaa gaagcctgca gtgccatatg 60
acccctgagc catggactgg agcctgaaag gcagcgtaca ccctgctcct gatcttgctg 120
cttgtttcct ctctgtggct ccattcatag cacagttgtt gcactgaggc ttgtgcaggc 180
cgagcaaggc caagctggct caaagagcaa ccagtcaact ctgccacggt gtgccaggca 240
ccggttctcc agccaccaac ctcactcgct cccgcaaatg gcacatcagt tcttctaccc 300
taaaggtagg accaaagggc atctgctttt ctgaagtcct ctgctctatc agccatcacg 360
tggcagccac tcnggctgtg tcgacgcgg   389

<210> 420
<211> 408
<212> DNA
<213> Homo sapiens

<400> 420
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga caccttttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg aagtgctatg acaaacctgg caagcccg   408

<210> 421
<211> 352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> n = A,T,C or G

<400> 421
```
gctcaaaaat cttttactg atnggcatgg ctacacaatc attgactatt acggaggcca 60
gaggagaatg aggcctggcc tgggagccct gtgcctacta naagcacatt agattatcca 120
ttcactgaca gaacaggtct tttttgggtc cttcttctcc accacnatat acttgcagtc 180
ctccttcttg aagattcttt ggcagttgtc tttgtcataa cccacaggtg tagaaacaag 240
ggtgcaacat gaaatttctg tttcgtagca agtgcatgtc tcacaagttg gcangtctgc 300
cactccgagt ttattgggtg tttgtttcct ttgagatcca tgcatttcct gg       352
```

<210> 422
<211> 337
<212> DNA
<213> Homo sapiens

<400> 422
```
atgccaccat gctggcaatg cagcgggcgg tcgaaggcct gcatatccag cccaagctgg 60
cgatgatcga cggcaaccgt tgcccgaagt tgccgatgcc agccgaagcg gtggtcaagg 120
gcgatagcaa ggtgccggcg atcgcggcgg cgtcaatcct ggccaaggtc agccgtgatc 180
gtgaaatggc agctgtcgaa ttgatctacc cgggttatgg catcggcggg cataagggct 240
atccgacacc ggtgcacctg gaagccttgc agcggctggg gccgacgccg attcaccgac 300
gcttcttccg ccggtacggc tggcctatga aaattat                       337
```

<210> 423
<211> 310
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(310)
<223> n = A,T,C or G

<400> 423
```
gctcaaaaat cttttactg atatggcatg gctacacaat cattgactat tagaggccag 60
aggagaatga ggcctggcct gggagccctg tgcctactan aagcncatta gattatccat 120
tcactgacag aacaggtctt ttttgggtcc ttcttctcca ccacgatata cttgcagtcc 180
tccttcttga agattctttg gcagttgtct tgtcataac ccacaggtgt anaaacaagg 240
gtgcaacatg aaatttctgt ttcgtagcaa gtgcatgtct cacagttgtc aagtctgccc 300
tccgagttta                                                      310
```

<210> 424
<211> 370

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 424
gctcaaaaat cttttttactg ataggcatgg ctacacaatc attgactatt agaggccaga 60
ggagaatgag gcctggcctg ggagccctgt gcctactaga agcacattag attatccatt 120
cactgacaga acaggtcttt tttgggtcct tcttctccac cacgatatac ttgcagtcct 180
ccttcttgaa gattctttgg cagttgtctt tgtcataacc cacaggtgta gaaacatcct 240
ggttgaatct cctggaactc cctcattagg tatgaaatag catgatgcat tgcataaagt 300
cacgaaggtg gcaaagatca caacgctgcc cagganaaca ttcattgtga taagcaggac 360
tccgtcgacg                                                         370

<210> 425
<211> 216
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 425
aattgctatn ntttattttg ccactcaaaa taattaccaa aaaaaaaaaa tnttaaatga 60
taacaacnca acatcaaggn aaananaaca ggaatggntg actntgcata aatnggccga 120
anattatcca ttatnttaag ggttgacttc aggntacagc acacagacaa acatgcccag 180
gaggntntca ggaccgctcg atgtnttntg aggagg                           216

<210> 426
<211> 596
<212> DNA
<213> Homo sapiens

<400> 426
cttccagtga ggataaccct gttgccccgg gccgaggttc tccattaggc tctgattgat 60
tggcagtcag tgatggaagg gtgttctgat cattccgact gccccaaggg tcgctggcca 120
gctctctgtt ttgctgagtt ggcagtagga cctaatttgt taattaagag tagatggtga 180
gctgtccttg tattttgatt aacctaatgg ccttcccagc acgactcgga ttcagctgga 240
gacatcacgg caactttaa tgaaatgatt tgaagggcca ttaagaggca cttcccgtta 300
ttaggcagtt catctgcact gataacttct tggcagctga gctggtcgga gctgtggccc 360
aaacgcacac ttggcttttg gtttttgagat acaactctta atctttttagt catgcttgag 420
ggtggatggc cttttcagct ttaacccaat ttgcactgcc ttggaagtgt agccaggaga 480
atacactcat atactcgtgg gcttagaggc cacagcagat gtcattggtc tactgcctga 540
gtcccgctgg tcccatccca ggaccttcca tcggcgagta cctgggagcc cgtgct    596

<210> 427
```

<211> 107
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 427
gaagaattca agttaggttt attcaaaggg cttacngaga atcctanacc caggncccag 60
cccgggagca gccttanaga gctcctgttt gactgcccgg ctcagng 107

<210> 428
<211> 38
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(38)
<223> n = A,T,C or G

<400> 428
gaacttccna anaangactt tattcactat tttacatt 38

<210> 429
<211> 544
<212> DNA
<213> Homo sapiens

<400> 429
ctttgctgga cggaataaaa gtggacgcaa gcatgacctc ctgatgaggg cgctgcattt 60
attgaagagc ggctgcagcc ctgcggttca gattaaaatc cgagaattgt atagacgccg 120
atatccacga actcttgaag gactttctga tttatccaca atcaaatcat cggttttcag 180
tttggatggt ggctcatcac ctgtagaacc tgacttggcc gtggctggaa tccactcgtt 240
gccttccact tcagttacac ctcactcacc atcctctcct gttggttctg tgctgcttca 300
agatactaag cccacatttg agatgcagca gccatctccc ccaattcctc ctgtccatcc 360
tgatgtgcag ttaaaaaatc tgccctttta tgatgtcctt gatgttctca tcaagcccac 420
gagtttagtt caaagcagta ttcagcgatt tcaagagaag ttttttattt ttgctttgac 480
acctcaacaa gttagagaga tatgcatatc cagggatttt ttgccaggtg gtaggagaga 540
ttat 544

<210> 430
<211> 507
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(507)

<223> n = A,T,C or G

<400> 430
cttatcncaa tggggctccc aaacttggct gtgcagtgga aactccgggg gaattttgaa 60
gaacactgac acccatcttc caccccgaca ctctgattta attgggctgc agtgagaaca 120
gagcatcaat ttaaaaagct gcccagaatg ttntcctggg cagcgttgtg atctttgccn 180
ccttcgtgac tttatgcaat gcatcatgct atttcatacc taatgaggga gttccaggag 240
attcaaccag gatgtttcta cncctgtggg ttatgacaaa gacaactgcc aaagaatntt 300
caagaaggag gactgcaagt atatcgtggt ggagaagaag gacccaaaaa agacctgttc 360
tgtcagtgaa tggataatct aatgtgcttc tagtaggcac agggctccca ggccaggcct 420
cattctcctc tggcctctaa tagtcaatga ttgtgtagcc atgcctatca gtaaaaagat 480
ttttgagcaa aaaaaaaaaa aaaaaaa 507

<210> 431
<211> 392
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(392)
<223> n = A,T,C or G

<400> 431
gaaaattcag aatggataaa aacaaatgaa gtacaaaata tttcagattt acatagcgat 60
aaacaagaaa gcacttatca ggaggactta caaatggaag tacactctan aaccatcatc 120
tatcatggct aaatgtgaga ttagcacagc tgtattattt gtacattgca aacacctaga 180
aagagatggg aaacaaaatc ccaggagttt tgtgtgtgga gtcctgggtt ttccaacaga 240
catcattcca gcattctgag attagggnga ttggggatca ttctggagtt ggaatgttca 300
acaaaagtga tgttgttagg taaaatgtac aacttctgga tctatgcaga cattgaaggt 360
gcaatgagtc tggcttttac tctgctgttt ct 392

<210> 432
<211> 387
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(387)
<223> n = A,T,C or G

<400> 432
ggtatccnta cataatcaaa tatagctgta gtacatgttt tcattggngt agattaccac 60
aaatgcaagg caacatgtgt agatctcttg tcttattctt ttgtctataa tactgtattg 120
ngtagtccaa gctctcggna gtccagccac tgngaaacat gctcccttta gattaacctc 180
gtggacnctn ttgttgnatt gtctgaactg tagngccctg tattttgctt ctgtctgnga 240
attctgttgc ttctggggca tttccttgng atgcagagga ccaccacaca gatgacagca 300
atctgaattg ntccaatcac agctgcgatt aagacatact gaaatcgtac aggaccggga 360
acaacgtata gaacactgga gtccttt 387

<210> 433
<211> 281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(281)
<223> n = A,T,C or G

<400> 433
ttcaactagc anagaanact gcttcagggn gtgtaaaatg aaaggcttcc acgcagttat 60
ctgattaaag aacactaaga gagggacaag gctagaagcc gcaggatgtc tacactatag 120
caggcnctat ttgggttggc tggaggagct gtggaaaaca tggagagatt ggcgctggag 180
atcgccgtgg ctattcctcn ttgntattac accagngagg ntctctgtnt gcccactggt 240
tnnaaaaccg ntatacaata atgatagaat aggacacaca t 281

<210> 434
<211> 484
<212> DNA
<213> Homo sapiens

<400> 434
ttttaaaata agcatttagt gctcagtccc tactgagtac tctttctctc ccctcctctg 60
aatttaattc tttcaacttg caatttgcaa ggattacaca tttcactgtg atgtatattg 120
tgttgcaaaa aaaaaaaagt gtctttgttt aaaattactt ggtttgtgaa tccatcttgc 180
tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa acatctgaag 240
agctagtcta tcagcatctg acaggtgaat tggatggttc tcagaaccat ttcacccaga 300
cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca taacaaaccc 360
tgctccaatc tgtcacataa aagtctgtga cttgaagttt agtcagcacc cccaccaaac 420
tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataaag tacccatgtc 480
ttta 484

<210> 435
<211> 424
<212> DNA
<213> Homo sapiens

<400> 435
gcgccgctca gagcaggtca ctttctgcct tccacgtcct ccttcaagga agccccatgt 60
gggtagcttt caatatcgca ggttcttact cctctgcctc tataagctca aacccaccaa 120
cgatcgggca agtaaacccc ctccctcgcc gacttcggaa ctggcgagag ttcagcgcag 180
atgggcctgt ggggaggggg caagatagat gaggggggagc ggcatggtgc ggggtgaccc 240
cttggagaga ggaaaaaggc cacaagaggg gctgccaccg ccactaacgg agatggccct 300
ggtagagacc tttgggggtc tggaacctct ggactcccca tgctctaact cccacactct 360
gctatcagaa acttaaactt gaggattttc tctgtttttc actcgcaata aattcagagc 420
aaac 424

<210> 436
<211> 667
<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(667)
<223> n = A,T,C or G

<400> 436
accttgggaa nactctcaca atataaaggg tcgtagactt tactccaaat tccaaaaagg 60
tcctggccat gtaatcctga aagttttccc aaggtagcta taaaatcctt ataagggtgc 120
agcctcttct ggaattcctc tgatttcaaa gtctcactct caagttcttg aaaacgaggg 180
cagttcctga aaggcaggta tagcaactga tcttcagaaa gaggaactgt gtgcaccggg 240
atgggctgcc agagtaggat aggattccag atgctgacac cttctggggg aaacagggct 300
gccaggtttg tcatagcact catcaaagtc cggtcaacgt ctgtgcttcg aatataaacc 360
tgttcatgtt tataggactc attcaagaat tttctatatc tctttcttat atactctcca 420
agttcataat gctgctccat gcccagctgg gtgagttggc caaatccttg tggccatgag 480
gattccttta tggggtcagt gggaaaggtg tcaatgggac ttcggtctcc atgccgaaac 540
accaaagtca caaacttcaa ctccttggct agtacacttc ggtctagcca gaaaaaaagc 600
agaaacaaga agccaaggct aaggcttgct gccctgccag gaggaggggt gcagctctca 660
tgttgag   667

<210> 437
<211> 693
<212> DNA
<213> Homo sapiens

<400> 437
ctacgtctca accctcattt ttaggtaagg aatcttaagt ccaaagatat taagtgactc 60
acacagccag gtaaggaaag ctggattggc acactaggac tctaccatac cgggttttgt 120
taaagctcag gttaggaggc tgataagctt ggaaggaact tcagacagct ttttcagatc 180
ataaaagata attcttagcc catgttcttc tccagagcag acctgaaatg acagcacagc 240
aggtactcct ctattttcac ccctcttgct tctactctct ggcagtcaga cctgtgggag 300
gccatgggag aaagcagctc tctggatgtt tgtacagatc atggactatt ctctgtggac 360
catttctcca ggttacccta ggtgtcacta ttgggggggac agccagcatc tttagctttc 420
atttgagttt ctgtctgtct tcagtagagg aaacttttgc tcttcacact tcacatctga 480
acacctaact gctgttgctc ctgaggtggt gaaagacaga tatagagctt acagtattta 540
tcctatttct aggcactgag ggctgtgggg taccttgtgg tgccaaaaca gatcctgttt 600
taaggacatg ttgcttcaga gatgtctgta actatctggg ggctctgttg gctctttacc 660
ctgcatcatg tgctctcttg gctgaaaatg acc   693

<210> 438
<211> 360
<212> DNA
<213> Homo sapiens

<400> 438
ctgcttatca caatgaatgt tctcctgggc agcgttgtga tctttgccac cttcgtgact 60
ttatgcaatg catcatgcta tttcatacct aatgagggag ttccaggaga ttcaaccagg 120
atgtttctac acctgtgggt tatgacaaag acaactgcca aagaatcttc aagaaggagg 180
actgcaagta tatctggtgg agaagaagga cccaaaaaag acctgttctg tcagtgaatg 240
gataatctaa tgtgcttcta gtaggcacag ggctcccagg ccaggcctca ttctcctctg 300

gcctctaata gtcaataatt gtgtagccat gcctatcagt aaaaagattt ttgagcaaac 360

<210> 439
<211> 431
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 439
gttcctnnta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420
aatttagtag t 431

<210> 440
<211> 523
<212> DNA
<213> Homo sapiens

<400> 440
agagataaag cttaggtcaa agttcataga gttcccatga actatatgac tggccacaca 60
ggatcttttg tatttaagga ttctgagatt ttgcttgagc aggattagat aaggctgttc 120
tttaaatgtc tgaaatggaa cagatttcaa aaaaaaaccc cacaatctag ggtgggaaca 180
aggaaggaaa gatgtgaata ggctgatggg caaaaaacca atttacccat cagttccagc 240
cttctctcaa ggagaggcaa agaaaggaga tacagtggag acatctggaa agttttctcc 300
actggaaaac tgctactatc tgttttttata tttctgttaa aatatatgag gctacagaac 360
taaaaattaa aacctctttg tgtcccttgg tcctggaaca tttatgttcc tttttaaagaa 420
acaaaaatca aactttacag aaagatttga tgtatgtaat acatatagca gctcttgaag 480
tatatatatc atagcaaata agtcatctga tgagaacaag cta 523

<210> 441
<211> 430
<212> DNA
<213> Homo sapiens

<400> 441
gttcctccta actcctgcca gaaacagctc tcctcaacat gagagctgca cccctcctcc 60
tggccagggc agcaagcctt agccttggct tcttgtttct gctttttttc tggctagacc 120
gaagtgtact agccaaggag ttgaagtttg tgactttggt gtttcggcat ggagaccgaa 180
gtcccattga cacctttccc actgacccca taaaggaatc ctcatggcca caaggatttg 240
gccaactcac ccagctgggc atggagcagc attatgaact tggagagtat ataagaaaga 300
gatatagaaa attcttgaat gagtcctata aacatgaaca ggtttatatt cgaagcacag 360
acgttgaccg gactttgatg agtgctatga caaacctggc agcccgtcga cgcggccgcg 420

```
aatttagtag                                                    430
```

```
<210> 442
<211> 362
<212> DNA
<213> Homo sapiens
```

```
<400> 442
ctaaggaatt agtagtgttc ccatcacttg tttggagtgt gctattctaa aagattttga 60
tttcctggaa tgacaattat attttaactt tggtggggga aagagttata ggaccacagt 120
cttcacttct gatacttgta aattaatctt ttattgcact tgttttgacc attaagctat 180
atgtttagaa atggtcattt tacggaaaaa ttagaaaaat tctgataata gtgcagaata 240
aatgaattaa tgttttactt aatttatatt gaactgtcaa tgacaaataa aaattctttt 300
tgattatttt ttgtttcat ttaccagaat aaaaactaag aattaaaagt ttgattacag 360
tc                                                            362
```

```
<210> 443
<211> 624
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(624)
<223> n = A,T,C or G
```

```
<400> 443
tttttttttt gcaacacaat atacatcaca gtgaaatgtg taatccttgc aaattgcaag 60
ttgaaagaat taaattcaga ggaggggaga gaaagagtac tcagtaggga ctgagcacta 120
aatgcttatt ttaaaagaaa tgtaaagagc agaaagcaat tcaggctacc ctgccttttg 180
tgctggctag tactccggtc ggtgtcagca gcacgtggca ttgaacattg caatgtggag 240
cccaaaccac agaaaatggg gtgaaattgg ccaactttct attaacttgg cttcctgttt 300
tataaaatat tgtgaataat atcacctact tcaaagggca gttatgaggc ttaaatgaac 360
taacgcctac aaaacactta aacatagata acataggtgc aagtactatg tatctggtac 420
atggtaaaca tccttattat taaagtcaac gctaaaatga atgtgtgtgc atatgctaat 480
agtacagaga gagggcactt aaaccaacta agggcctgga gggaaggttt cctggaaaga 540
ngatgcttgt gctgggtcca aatcttggtc tactatgacc ttggccaaat tatttaaact 600
ttgtccctat ctgctaaaca gatc                                    624
```

```
<210> 444
<211> 425
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(425)
<223> n = A,T,C or G
```

```
<400> 444
gcacatcatt nntcttgcat tctttgagaa taagaagatc agtaaatagt tcagaagtgg 60
```

```
gaagctttgt ccaggcctgt gtgtgaaccc aatgttttgc ttagaaatag aacaagtaag 120
ttcattgcta tagcataaca caaaatttgc ataagtggtg gtcagcaaat ccttgaatgc 180
tgcttaatgt gagaggttgg taaaatcctt tgtgcaacac tctaactccc tgaatgtttt 240
gctgtgctgg gacctgtgca tgccagacaa ggccaagctg gctgaaagag caaccagcca 300
cctctgcaat ctgccacctc ctgctggcag gatttgtttt tgcatcctgt gaagagccaa 360
ggaggcacca gggcataagt gagtagactt atggtcgacg cggccgcgaa tttagtagta 420
gtaga                                                            425
```

```
<210> 445
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

<400> 445
catgtttatg nttttggatt actttgggca cctagtgttt ctaaatcgtc tatcattctt 60
ttctgttttt caaaagcaga gatggccaga gtctcaacaa actgtatctt caagtctttg 120
tgaaattctt tgcatgtggc agattattgg atgtagtttc ctttaactag catataaatc 180
tggtgtgttt cagataaatg aacagcaaaa tgtggtggaa ttaccatttg gaacattgtg 240
aatgaaaaat tgtgtctcta gattatgtaa caaataacta tttcctaacc attgatcttt 300
ggatttttat aatcctactc acaaatgact aggcttctcc tcttgtattt tgaagcagtg 360
tgggtgctgg attgataaaa aaaaaaaaag tcgacgcggc cgcgaattta gtag      414
```

```
<210> 446
<211> 631
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(631)
<223> n = A,T,C or G

<400> 446
acaaattaga anaaagtgcc agagaacacc acataccttg tccggaacat tacaatggct 60
tctgcatgca tgggaagtgt gagcattcta tcaatatgca ggagccatct tgcaggtgtg 120
atgctggtta tactggacaa cactgtgaaa aaaggacta cagtgttcta tacgttgttc 180
ccggtcctgt acgatttcag tatgtcttaa tcgcagctgt gattggaaca attcagattg 240
ctgtcatctg tgtggtggtc ctctgcatca caagggccaa actttaggta atagcattgg 300
actgagattt gtaaactttc caaccttcca ggaaatgccc cagaagcaac agaattcaca 360
gacagaagca aaatacaggg cactacagtt cagacaatac aacaagagcg tccacgaggt 420
taatctaaag ggagcatgtt tcacagtggc tggactaccg agagcttgga ctacacaata 480
cagtattata gacaaaagaa taagacaaga gatctacaca tgttgccttg catttgtggt 540
aatctacacc aatgaaaaca tgtactacag ctatatttga ttatgtatgg atatatttga 600
aatagtatac attgtcttga tgttttttct g                                631
```

```
<210> 447
```

```
<211> 585
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

<400> 447
ccttgggaaa antntcacaa tataaagggt cgtagacttt actccaaatt ccaaaaaggt 60
cctggccatg taatcctgaa agttttccca aggtagctat aaaatcctta taagggtgca 120
gcctcttctg gaattcctct gatttcaaag tctcactctc aagttcttga aaacgagggc 180
agttcctgaa aggcaggtat agcaactgat cttcagaaag aggaactgtg tgcaccggga 240
tgggctgcca gagtaggata ggattccaga tgctgacacc ttctggggga aacagggctg 300
ccaggtttgt catagcactc atcaaagtcc ggtcaacgtc tgtgcttcga atataaacct 360
gttcatgttt ataggactca ttcaagaatt ttctatatct ctttcttata tactctccaa 420
gttcataatg ctgctccatg cccagctggg tgagttggcc aaatccttgt ggccatgagg 480
attcctttat ggggtcagtg ggaaaggtgt caatgggact tcggtctcca tgccgaaaca 540
ccaaagtcac aaacttcaac tccttggcta gtacacttcg gtcta               585


<210> 448
<211> 93
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(93)
<223> n = A,T,C or G

<400> 448
tgctcgtggg tcattctgan nnccgaactg accntgccag ccctgccgan gggccnccat 60
ggctccctag tgccctggag agganggggc tag                            93


<210> 449
<211> 706
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(706)
<223> n = A,T,C or G

<400> 449
ccaagttcat gctntgtgct ggacgctgga caggggcaa aagcnnttgc tcgtgggtca 60
ttctgancac cgaactgacc atgccagccc tgccgatggt cctccatggc tccctagtgc 120
cctggagagg aggtgtctag tcagagagta gtcctggaag gtggcctctg ngaggagcca 180
cggggacagc atcctgcaga tggtcgggcg cgtcccattc gccattcagg ctgcgcaact 240
gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg aaagggggat 300
```

```
gtgctgcaag gcgattaagt tgggtaacgc cagggttttc ccagtcncga cgttgtaaaa 360
cgacggccag tgaattgaat ttaggtgacn ctatagaaga gctatgacgt cgcatgcacg 420
cgtacgtaag cttggatcct ctagagcggc cgcctactac tactaaattc gcggccgcgt 480
cgacgtggga tccncactga gagagtggag agtgacatgt gctggacnct gtccatgaag 540
cactgagcag aagctggagg cacaacgcnc cagacactca cagctactca ggaggctgag 600
aacaggttga acctgggagg tggaggttgc aatgagctga gatcaggccn ctgcncccca 660
gcatggatga cagagtgaaa ctccatctta aaaaaaaaaa aaaaaa      706
```

<210> 450
<211> 493
<212> DNA
<213> Homo sapiens

<400> 450
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gagacggagt gtcactctgt tgcccaggct ggagtgcagc aagacactgt ctaagaaaaa 60
acagttttaa aaggtaaaac aacataaaaa gaaatatcct atagtggaaa taagagagtc 120
aaatgaggct gagaacttta caaagggatc ttacagacat gtcgccaata tcactgcatg 180
agcctaagta taagaacaac ctttggggag aaaccatcat ttgacagtga ggtacaattc 240
caagtcaggt agtgaaatgg gtggaattaa actcaaatta atcctgccag ctgaaacgca 300
agagacactg tcagagagtt aaaaagtgag ttctatccat gaggtgattc cacagtcttc 360
tcaagtcaac acatctgtga actcacagac caagttctta aaccactgtt caaactctgc 420
tacacatcag aatcacctgg agagctttac aaactcccat tgccgagggt cgacgcggcc 480
gcgaatttag tag                                            493
```

<210> 451
<211> 501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(501)
<223> n = A,T,C or G

<400> 451
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gggcgcgtcc cattcgccat tcaggctgcg caactgttgg gaagggcgat cggtgcgggc 60
ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct gcaaggcgat taagttgggt 120
aacgccaggg ttttcccagt cncgacgttg taaaacgacg gccagtgaat tgaatttagg 180
tgacnctata gaagagctat gacgtcgcat gcacgcgtac gtaagcttgg atcctctaga 240
gcggccgcct actactacta aattcgcggc cgcgtcgacg tgggatccnc actgagagag 300
tggagagtga catgtgctgg acnctgtcca tgaagcactg agcagaagct ggaggcacaa 360
cgcnccagac actcacagct actcaggagg ctgagaacag gttgaacctg ggaggtggag 420
gttgcaatga gctgagatca ggccnctgcn ccccagcatg gatgacagag tgaaactcca 480
tcttaaaaaa aaaaaaaaaa a                                    501
```

<210> 452
<211> 51
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(51)
<223> n = A,T,C or G

<400> 452
agacggtttc accnttacaa cnccttttag gatgggnntt ggggagcaag c   51

<210> 453
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(317)
<223> n = A,T,C or G

<400> 453
tacatcttgc tttttcccca ttggaactag tcattaaccc atctctgaac tggtagaaaa 60
acatctgaag agctagtcta tcagcatctg gcaagtgaat tggatggttc tcagaaccat 120
ttcacccana cagcctgttt ctatcctgtt taataaatta gtttgggttc tctacatgca 180
taacaaaccc tgctccaatc tgtcacataa aagtctgtga cttgaagttt antcagcacc 240
cccaccaaac tttatttttc tatgtgtttt ttgcaacata tgagtgtttt gaaaataagg 300
tacccatgtc tttatta   317

<210> 454
<211> 231
<212> DNA
<213> Homo sapiens

<400> 454
ttcgaggtac aatcaactct cagagtgtag tttccttcta tagatgagtc agcattaata 60
taagccacgc cacgctcttg aaggagtctt gaattctcct ctgctcactc agtagaacca 120
agaagaccaa attcttctgc atcccagctt gcaaacaaaa ttgttcttct aggtctccac 180
ccttcctttt tcagtgttcc aaagctcctc acaatttcat gaacaacagc t   231

<210> 455
<211> 231
<212> DNA
<213> Homo sapiens

<400> 455
taccaaagag ggcataataa tcagtctcac agtagggttc accatcctcc aagtgaaaaa 60
cattgttccg aatgggcttt ccacaggcta cacacacaaa acaggaaaca tgccaagttt 120
gtttcaacgc attgatgact tctccaagga tcttcctttg gcatcgacca cattcagggg 180
caaagaattt ctcatagcac agctcacaat acagggctcc tttctcctct a   231

<210> 456
<211> 231
<212> DNA
<213> Homo sapiens

<400> 456
ttggcaggta cccttacaaa gaagacacca taccttatgc gttattaggt ggaataatca 60
ttccattcag tattatcgtt attattcttg gagaaaccct gtctgtttac tgtaaccttt 120
tgcactcaaa ttcctttatc aggaataact acatagccac tatttacaaa gccattggaa 180
ccttttttatt tggtgcagct gctagtcagt ccctgactga cattgccaag t   231

<210> 457
<211> 231
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 457
cgaggtaccc aggggtctga aaatctctnn tttantagtc gatagcaaaa ttgttcatca 60
gcattcctta atatgatctt gctataatta gattttctc cattagagtt catacagttt 120
tatttgattt tattagcaat ctctttcaga agacccttga gatcattaag ctttgtatcc 180
agttgtctaa atcgatgcct catttcctct gaggtgtcgc tggcttttgt g   231

<210> 458
<211> 231
<212> DNA
<213> Homo sapiens

<400> 458
aggtctggtt cccccacctt ccactccct ctactctctc taggactggg ctgggccaag 60
agaagagggg tggttaggga agccgttgag acctgaagcc ccaccctcta ccttccttca 120
acaccctaac cttgggtaac agcatttgga attatcattt gggatgagta gaatttccaa 180
ggtcctgggt taggcatttt gggggggccag accccaggag aagaagattc t   231

<210> 459
<211> 231
<212> DNA
<213> Homo sapiens

<400> 459
ggtaccgagg ctcgctgaca cagagaaacc ccaacgcgag gaaaggaatg gccagccaca 60
ccttcgcgaa acctgtggtg gcccaccagt cctaacggga caggacagag agacagagca 120
gccctgcact gttttccctc caccacagcc atcctgtccc tcattggctc tgtgctttcc 180
actatacaca gtcaccgtcc caatgagaaa caagaaggag caccctccac a   231

<210> 460
<211> 231
<212> DNA
<213> Homo sapiens

<400> 460

```
gcaggtataa catgctgcaa caacagatgt gactaggaac ggccggtgac atggggaggg 60
cctatcaccc tattcttggg ggctgcttct tcacagtgat catgaagcct agcagcaaat 120
cccacctccc cacacgcaca cggccagcct ggagcccaca gaagggtcct cctgcagcca 180
gtggagcttg gtccagcctc cagtccaccc ctaccaggct taaggataga a         231
```

<210> 461
<211> 231
<212> DNA
<213> Homo sapiens

<400> 461
```
cgaggtttga gaagctctaa tgtgcagggg agccgagaag caggcggcct agggagggtc 60
gcgtgtgctc cagaagagtg tgtgcatgcc agaggggaaa caggcgcctg tgtgtcctgg 120
gtggggttca gtgaggagtg ggaaattggt tcagcagaac caagccgttg ggtgaataag 180
aggggattc catggcactg atagagccct atagtttcag agctgggaat t          231
```

<210> 462
<211> 231
<212> DNA
<213> Homo sapiens

<400> 462
```
aggtaccctc attgtagcca tgggaaaatt gatgttcagt ggggatcagt gaattaaatg 60
gggtcatgca agtataaaaa ttaaaaaaaa aagacttcat gcccaatctc atatgatgtg 120
gaagaactgt tagagagacc aacagggtag tgggttagag atttccagag tcttacattt 180
tctagaggag gtatttaatt tcttctcact catccagtgt tgtatttagg a          231
```

<210> 463
<211> 231
<212> DNA
<213> Homo sapiens

<400> 463
```
tactccagcc tggtgacaga gcgagaccct atcaccgccc cccacccac caaaaaaaaa 60
actgagtaga caggtgtcct cttggcatgg taagtcttaa gtcccctccc agatctgtga 120
catttgacag gtgtcttttc ctctggacct cggtgtcccc atctgagtga gaaaaggcag 180
tggggaggtg gatcttccag tcgaagcggt atagaagccc gtgtgaaaag c          231
```

<210> 464
<211> 231
<212> DNA
<213> Homo sapiens

<400> 464
```
gtactctaag attttatcta agttgccttt tctgggtggg aaagtttaac cttagtgact 60
aaggacatca catatgaaga atgtttaagt tggaggtggc aacgtgaatt gcaaacaggg 120
cctgcttcag tgactgtgtg cctgtagtcc cagctactcg ggagtctgtg tgaggccagg 180
ggtgccagcg caccagctag atgctctgta acttctaggc cccattttcc c          231
```

<210> 465
<211> 231

<210> 465
<212> DNA
<213> Homo sapiens

<400> 465
```
catgttgttg tagctgtggt aatgctggct gcatctcaga cagggttaac ttcagctcct 60
gtggcaaatt agcaacaaat tctgacatca tatttatggt ttctgtatct ttgttgatga 120
aggatggcac aatttttgct tgtgttcata atatactcag attagttcag ctccatcaga 180
taaactggag acatgcagga cattagggta gtgttgtagc tctggtaatg a           231
```

<210> 466
<211> 231
<212> DNA
<213> Homo sapiens

<400> 466
```
caggtacctc tttccattgg atactgtgct agcaagcatg ctctccgggg ttttttttaat 60
ggccttcgaa cagaacttgc cacataccca ggtataatag tttctaacat ttgcccagga 120
cctgtgcaat caaatattgt ggagaattcc ctagctggag aagtcacaaa gactataggc 180
aataatggag accagtccca caagatgaca accagtcgtt gtgtgcggct g           231
```

<210> 467
<211> 311
<212> DNA
<213> Homo sapiens

<400> 467
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gtacaccctg gcacagtcca atctgaactg gttcggcact catctttcat gagatggatg 60
tggtggcttt tctccttttt catcaagact cctcagcagg gagcccagac cagcctgcac 120
tgtgccttaa cagaaggtct tgagattcta agtgggaatc atttcagtga ctgtcatgtg 180
gcatgggtct ctgcccaagc tcgtaatgag actatagcaa ggcggctgtg ggacgtcagt 240
tgtgacctgc tgggcctccc aatagactaa caggcagtgc cagttggacc caagagaaga 300
ctgcagcaga c                                                       311
```

<210> 468
<211> 3112
<212> DNA
<213> Homo sapiens

<400> 468
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cattgtgttg ggagaaaaac agaggggaga tttgtgtggc tgcagccgag ggagaccagg 60
aagatctgca tggtgggaag gacctgatga tacagagttt gataggagac aattaaaggc 120
tggaaggcac tggatgcctg atgatgaagt ggactttcaa actggggcac tactgaaacg 180
atgggatggc cagagacaca ggagatgagt tggagcaagc tcaataacaa agtggttcaa 240
cgaggacttg gaattgcatg gagctggagc tgaagtttag cccaattgtt tactagttga 300
gtgaatgtgg atgattggat gatcatttct catctctgag cctcaggttc cccatccata 360
aaatgggata cacagtatga tctataaagt gggatatagt atgatctact tcactgggtt 420
atttgaagga tgaattgaga taatttattt caggtgccta gaacaatgcc cagattagta 480
catttggtgg aactgagaaa tggcataaca ccaaatttaa tatatgtcag atgttactat 540
gattatcatt caatctcata gttttgtcat ggcccaattt atcctcactt gtgcctcaac 600
aaattgaact gttaacaaag gaatctctgg tcctgggtaa tggctgagca ccactgagca 660
tttccattcc agttggcttc ttgggtttgc tagctgcatc actagtcatc ttaaataaat 720
```

```
gaagttttaa catttctcca gtgatttttt tatctcacct ttgaagatac tatgttatgt 780
gattaaataa agaacttgag aagaacaggt ttcattaaac ataaaatcaa tgtagacgca 840
aattttctgg atgggcaata cttatgttca caggaaatgc tttaaaatat gcagaagata 900
attaaatggc aatggacaaa gtgaaaaact tagacttttt ttttttttt ggaagtatct 960
ggatgttcct tagtcactta aaggagaact gaaaaatagc agtgagttcc acataatcca 1020
acctgtgaga ttaaggctct ttgtggggaa ggacaaagat ctgtaaattt acagtttcct 1080
tccaaagcca acgtcgaatt ttgaaacata tcaaagctct tcttcaagac aaataatcta 1140
tagtacatct ttcttatggg atgcacttat gaaaaatggt ggctgtcaac atctagtcac 1200
tttagctctc aaaatggttc attttaagag aaagttttag aatctcatat ttattcctgt 1260
ggaaggacag cattgtggct tggactttat aaggtcttta ttcaactaaa taggtgagaa 1320
ataagaaagg ctgctgactt taccatctga ggccacacat ctgctgaaat ggagataatt 1380
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atttccagcc cctttaaata tccacacaca caggaagcac aaaaggaagc acagagatcc 1500
ctgggagaaa tgcccggccg ccatcttggg tcatcgatga gcctcgccct gtgcctggtc 1560
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aaagtgagca ttaccaatga gaggaaaaca gacgagaaaa tcttgatggc ttcacaagac 1740
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accacggggc agagggtcag gattctggcc ctgctgccta aactgtgcgt tcataaccaa 1860
atcatttcat atttctaacc ctcaaaacaa agctgttgta atatctgatc tctacggttc 1920
cttctgggcc caacattctc catatatcca gccacactca tttttaatat ttagttccca 1980
gatctgtact gtgacctttc tacactgtag aataacatta ctcattttgt tcaaagaccc 2040
ttcgtgttgc tgcctaatat gtagctgact gttttttccta aggagtgttc tggcccaggg 2100
gatctgtgaa caggctggga agcatctcaa gatctttcca gggttatact tactagcaca 2160
cagcatgatc attacggagt gaattatcta atcaacatca tcctcagtgt ctttgcccat 2220
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atatcacagg attaactttt tttttaacc tggaagaatt caatgttaca tgcagctatg 2340
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tacagccaca gcctctcccc atccctccag ccttatctgt catcaccatc aacccctccc 2520
atgcacctaa acaaaatcta acttgtaatt ccttgaacat gtcaggcata cattattcct 2580
tctgcctgag aagctcttcc ttgtctctta aatctagaat gatgtaaagt tttgaataag 2640
ttgactatct tacttcatgc aaagaaggga cacatatgag attcatcatc acatgagaca 2700
gcaaatacta aaagtgtaat ttgattataa gagtttagat aaatatatga aatgcaagag 2760
ccacagaggg aatgtttatg gggcacgttt gtaagcctgg gatgtgaagc aaaggcaggg 2820
aacctcatag tatcttatat aatatacttc atttctctat ctctatcaca atatccaaca 2880
agcttttcac agaattcatg cagtgcaaat ccccaaaggt aacctttatc catttcatgg 2940
tgagtgcgct ttagaatttt ggcaaatcat actggtcact tatctcaact ttgagatgtg 3000
tttgtccttg tagttaattg aaagaaatag ggcactcttg tgagccactt tagggttcac 3060
tcctggcaat aaagaattta caaagagcaa aaaaaaaaa aaaaaaaaa aa       3112
```

<210> 469
<211> 2229
<212> DNA
<213> Homo sapiens

<400> 469
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agctctttgt aaattctttta ttgccaggag tgaaccctaa agtggctcac aagagtgccc 60
tatttctttc aattaactac aaggacaaac acatctcaaa gttgagataa gtgaccagta 120
tgatttgcca aaattctaaa gcgcactcac catgaaatgg ataaaggtta cctttgggga 180
tttgcactgc atgaattctg tgaaaagctt gttggatatt gtgatagaga tagagaaatg 240
```

```
aagtatatta tataagatac tatgaggttc cctgcctttg cttcacatcc caggcttaca 300
aacgtgcccc ataaacattc cctctgtggc tcttgcattt catatattta tctaaactct 360
tataatcaaa tacactttta gtatttgctg tctcatgtga tgatgaatct catatgtgtc 420
ccttctttgc atgaagtaag atagtcaact tattcaaaac tttacatcat tctagattta 480
agagacaagg aagagcttct caggcagaag gaataatgta tgcctgacat gttcaaggaa 540
ttacaagtta gattttgttt aggtgcatgg gaggggttga tggtgatgac agataaggct 600
ggagggatgg ggagaggctg tggctgtata cagcctcagt acaaggctaa gcattttaac 660
tttatactgg aaaaaaaatc aaacaaaggg gagggataaa ggacttagtc atctttgcac 720
tggaaaacaa aatatgtaat taaattccca tagctgcatg taacattgaa ttcttccagg 780
ttaaaaaaaa agttaatcct gtgatattaa tggaatgaca ttttgaggtc ttgagaatgg 840
gcacaaaagt gggaaatgaa tttcagtatg ggcaaagaca ctgaggatga tgttgattag 900
ataattcact ccgtaatgat catgctgtgt gctagtaagt ataaccctgg aaagatcttg 960
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cagtgtagaa aggtcacagt acagatctgg gaactaaata ttaaaaatga gtgtggctgg 1140
atatatggag aatgttgggc ccagaaggaa ccgtagagat cagatattac aacagctttg 1200
ttttgagggt tagaaatatg aaatgatttg gttatgaacg cacagtttag gcagcagggc 1260
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tttctaatgt ccttccctca caagcgggac caggcacagg gcgaggctca tcgatgaccc 1560
aagatggcgg ccgggcattt ctcccaggga tctctgtgct tccttttgtg cttcctgtgt 1620
gtgtggatat ttaaaggggc tggaaatgtg caaaaacatg tcactactta gacattatat 1680
tgtcatcttg ctgtttctag tgatgttaat tatctccatt tcagcagatg tgtggcctca 1740
gatggtaaag tcagcagcct ttcttatttc tcacctggaa atacatacga ccatttgagg 1800
agacaaatgg caaggtgtca gcataccctg aacttgagtt gagagctaca cacaatatta 1860
ttggtttccg agcatcacaa acaccctctc tgtttcttca ctgggcacag aatttttaata 1920
cttatttcag tgggctgttg gcaggaacaa atgaagcaat ctacataaag tcactagtgc 1980
agtgcctgac acacaccatt ctcttgaggt cccctctaga gatcccacag gtcatatgac 2040
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ggtcacctga ggtcaggagt tcaagaccag cctggccaat atggtgaaac cccatctcta 2160
ctaaaaatac aaaaattagc tgggcgtgct ggtgcatgcc tgtaatccca gccccaacac 2220
aatggaatt                                                       2229
```

<210> 470
<211> 2426
<212> DNA
<213> Homo sapiens

<400> 470
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gtaaattctt tattgccagg agtgaaccct aaagtggctc acaagagtgc cctatttctt 60
tcaattaact acaaggacaa acacatctca aagttgagat aagtgaccag tatgatttgc 120
caaaattcta aagcgcactc accatgaaat ggataaaggt tacctttggg gatttgcact 180
gcatgaattc tgtgaaaagc ttgttggata ttgtgataga gatagagaaa tgaagtatat 240
tatataagat actatgaggt tccctgcctt tgcttcacat cccaggctta caaacgtgcc 300
ccataaacat tccctctgtg gctcttgcat ttcatatatt tatctaaact cttataatca 360
aattacactt ttagtatttg ctgtctcatg tgatgatgaa tctcatatgt gtcccttctt 420
tgcatgaagt aagatagtca acttattcaa aactttacat cattctagat ttaagagaca 480
aggaagagct tctcaggcag aaggaataat gtatgcctga catgttcaag gaattacaag 540
ttagattttg tttaggtgca tgggaggggt tgatggtgat gacagataag gctggaggga 600
```

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tggggagagg ctgtggctgt atacagcctc agtacaaggc taagcatttt aactttatac 660
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<211> 812
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 473
<211> 5829
<212> DNA
<213> Homo sapiens

<400> 473
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<211> 1594
<212> DNA
<213> Homo sapiens

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<211> 2414
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (33)
<223> n=A,T,C or G

<400> 475
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<211> 3434
<212> DNA
<213> Homo sapiens

<400> 476

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<210> 477
<211> 140
<212> PRT
<213> Homo sapiens

<400> 477
Met Asp Gly His Thr Asp Ile Trp Arg Asn His Met Asp Thr Pro Pro
                5   10   15

His Tyr His Arg Asp Thr Asp Thr Arg Arg His His His Met Asp Thr
            20   25   30

Leu Ser His Tyr His Arg Asp Thr Arg His His Thr Val Thr Trp Thr
        35   40   45

His His His Thr His Glu His Thr Asp Thr Leu Pro Tyr Gly His Trp
    50   55   60

His Thr His Cys His Thr Val Thr Trp Thr His Leu His Thr Ile Thr
65   70   75   80

Pro Pro His Thr Leu Pro Val Asp Thr Arg Thr His Arg His Cys His
                85   90   95

Thr Asp Thr Gln Asn Thr Val Thr Arg Arg His His His Ala Asp Thr
            100   105   110

```
Pro Pro Leu Trp Cys Arg Leu Asn Tyr Pro Ala Gly Gly Thr Ala Val
        115                 120             125
```

```
Ala Tyr Ser Cys Leu Ser Asp Trp Leu Ser Pro Gln
    130                 135             140
```

<210> 478
<211> 143
<212> PRT
<213> Homo sapiens

<400> 478
```
Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
                5                 10                 15
```

```
Ser His Gly His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
            20                 25                 30
```

```
Gly Glu Ile Thr Trp Thr His His His Thr Ile Thr Gly Thr Gln Thr
        35                 40                 45
```

```
His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr
    50                 55                 60
```

```
Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr
65                 70                 75                 80
```

```
Pro Thr His Cys His Met Asp Thr Gly Thr His Thr Ala Thr Leu Ser
            85                 90                 95
```

```
His Gly His Thr Ser Thr Pro Ser His His His Thr His Cys Leu Trp
            100                105                110
```

```
Thr Gln Gly His Thr Asp Thr Val Thr Gln Ile His Lys Thr Leu Ser
        115                 120                 125
```

```
His Gly Asp Ile Thr Met Gln Ile His His His Ser Gly Ala Val
    130                 135                 140
```

<210> 479
<211> 222
<212> PRT
<213> Homo sapiens

<400> 479
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Met Tyr Arg His Thr Glu Thr Leu Pro His Gly Asp Thr Val Thr Gln
                5                 10                 15
```

Ser His Glu His Thr Gly Ile Val Thr Trp Thr Asp Thr Gln Thr Tyr
        20   25   30

Gly Glu Ile Thr Leu Thr His His His Thr Ile Thr Gly Thr Gln Thr
        35   40   45

His Gly Asp Ile Thr Thr Trp Thr His Cys His Thr Thr Thr Gly Thr
        50   55   60

Arg Asp Ile Thr Leu Ser His Gly His Thr Ile Thr His Met Asn Thr
65   70   75   80

Pro Thr His Cys His Met Asp Thr Ala Thr His Thr Ala Thr Leu Ser
          85   90   95

His Gly His Thr Ser Ile Pro Ser His His His.Thr His Cys His Val
        100   105   110

Asp Thr Arg Thr His Arg His Cys His Thr Asp Thr Gln Asn Thr Val
        115   120   125

Thr Arg Arg His His His Ala Asp Thr Pro Pro His Gly His Ser Thr
        130   135   140

Arg His Ser Ala Thr Gln Ile His His His Thr Glu Met Arg Thr His
145   150   155   160

Cys His Thr Asp Thr Thr Thr Ser Leu Pro His Phe His Val Ser Ala
         165   170   175

Gly Gly Val Gly Pro Thr Thr Leu Gly Ser Asn Arg Glu Ile Thr Trp
        180   -   185   190

Thr Tyr Ser Glu Gly Lys Ile Phe Phe Tyr Phe Leu Gly Asn Gln Ala
        195   200   205

Arg Leu Cys Leu Lys Lys Arg Lys Lys Lys Gln Tyr Thr Val
    210   215   220

<210> 480
<211> 144
<212> PRT
<213> Homo sapiens

<400> 480
Met Glu Pro Tyr Arg Gly Asn Glu Gln Pro Ser Gln Glu Gln Gly Val
         5   10   15

Cys Cys Leu Trp Gly Leu Gln Ser Leu Pro Gln Gly Ser Tyr Val Thr
        20   25   30

Val Gly Phe Leu Val Val Lys Arg Gln Thr Ile Gly Arg Leu Glu Arg
        35   40   45

Asp Phe Met Phe Lys Cys Arg Lys Gln Pro Gly Leu Pro Pro Ser Gly
    50   55   60

Leu Cys Leu Leu Trp Pro Trp Pro Asn Leu Glu Phe Gly Arg Arg Gln
65   70   75   80

Asp Arg Leu Thr Trp Ser Ser Val Ser Val Ala Gly Val Cys Ala Cys
            85   90   95

Arg Ala Arg Pro Gly Trp Leu Gly Glu Gln Pro Ala Thr Ser Ala Gly
            100   105   110

Val Arg Leu Glu Gln Val Glu Gln Pro Pro Ala His Pro Leu Gln Glu
        115   120   125

Ala Gly Val Ala Arg Phe Pro Arg Pro Glu Trp Val Pro Pro Asn Gly
    130   135   140

<210> 481
<211> 167
<212> PRT
<213> Homo sapiens

<400> 481
Met His Gly Pro Gln Val Leu Ala Arg Cys Ser Glu Cys Ala Cys Pro
                5   10   15

Ala Leu Ala Ala Thr Ser Ala Gly Val Arg Leu Glu Gly Val Asp Arg
            20   25   30

Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys Ser His Ser
            35   40   45

Leu Ser Gly Cys His Leu Met Ala Asp Gly Ala Lys Ala Leu Gly Lys
    50   55   60

Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr Asp Val Pro
65   70   75   80

Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser Ser Trp Arg
            85   90   95

Ala Leu Ala Glu Val Thr Gly Cys Ser Leu Gly Pro Leu Gly Leu Ala

```
                    100                    105                    110
    Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys Trp Ser His
            115                    120                    125

    Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr Ala Ala Phe
            130                    135                    140

    Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu Trp Ala Ser
    145                    150                    155                    160

    Trp Leu Ser Arg Gly Arg Pro
                    165
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```
<210> 482
<211> 143
<212> PRT
<213> Homo sapiens

<400> 482
Met Glu Pro Tyr Arg Gly Asn Lys Lys Gln Val Gln Glu Lys Gly Val
                    5                    10                    15

Pro Cys Leu Trp Gly Ser Ser Pro Cys Leu Arg Cys His Met Ala Leu
                    20                    25                    30

Arg Ala Ser Trp Leu Pro Gly Gly Gly Pro Gln Ala Ile Leu Gly Arg
            35                    40                    45

Thr Leu Cys Ser Ser Ala Glu Ser Ser Gln Asp Cys His Pro Gly Gly
        50                    55                    60

Pro Ser Ile Ala Leu Ala Lys Pro Cys Arg Gly Val Trp Leu Leu Phe
65                    70                    75                    80

Glu Pro Ala Trp Pro Pro Trp His Ala Arg Ala Pro Gly Ala Gly Thr
                    85                    90                    95

Leu Leu Arg Val Cys Leu Ser Cys Leu Gly Cys His Leu Cys Gly Gly
                    100                   105                   110

Ala Ser Gly Gly Gly Gly Pro Ala Thr Asn Leu Thr Gln Ser Arg Lys
            115                   120                   125

Trp Met Ala Met Phe Pro Gln Pro Glu Trp Leu Pro Pro Asp Gly
        130                   135                   140
```

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<210> 483
<211> 143
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<212> PRT
<213> Homo sapiens

<400> 483
Met Gln Thr Gln Arg Gly Asn Lys Gln Arg Ala Gln Glu Gln Gly Val
                5   10   15

Cys Cys Leu Trp Gly Ser Ser Pro Cys Leu Gly Ser Tyr Gly Thr Ala
            20   25   30

Gly Phe Leu Val Ala Lys Arg Arg Thr Thr Gly Leu Leu Glu Glu Asp
        35   40   45

Phe Thr Phe Lys Cys Arg Lys Gln Pro Lys Leu Pro Ser Met Arg Leu
    50   55   60

Ser Leu Leu Trp Pro Trp Arg Asp Leu Lys Phe Val Pro Arg Gln Asp
65   70   75   80

Lys Leu Thr Arg Ser Ser Val Ser Val Ala Gly Ala Tyr Ala Cys Arg
            85   90   95

Ala Gly Pro Gly Trp Leu Lys Glu Gln Pro Ala Thr Ser Ala Arg Val
            100   105   110

Arg Leu Val Gln Ala Glu His Pro Pro Pro His Pro Leu Glu Glu Val
        115   120   125

Gly Met Ala Arg Phe Pro Gln Pro Glu Cys Leu Pro Pro Tyr Cys
    130   135   140

        <210> 484
        <211> 30
        <212> PRT
        <213> Homo Sapien

        <400> 484
Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1   5   10   15
Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
            20   25   30

        <210> 485
        <211> 31
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 485

gggaagctta tcacctatgt gccgcctctg c   31

        <210> 486
        <211> 27
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 486
gcgaattctc acgctgagta tttggcc   27

        <210> 487
        <211> 36
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 487
cccgaattct tagctgccca tccgaacgcc ttcatc   36

        <210> 488
        <211> 33
        <212> DNA
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 488
gggaagcttc ttccccggct gcaccagctg tgc   33

        <210> 489
        <211> 19
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 489
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
1   5   10   15
Ser Val Ala

        <210> 490
        <211> 20

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        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 490
Tyr Leu Ala Ser Val Ala Ala Phe Pro Val Ala Ala Gly Ala Thr Cys
 1               5                  10                  15
Leu Ser His Ser
            20

        <210> 491
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 491
Thr Cys Leu Ser His Ser Val Ala Val Val Thr Ala Ser Ala Ala Leu
 1               5                  10                  15
Thr Gly Phe Thr
            20

        <210> 492
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 492
Ala Leu Thr Gly Phe Thr Phe Ser Ala Leu Gln Ile Leu Pro Tyr Thr
 1               5                  10                  15
Leu Ala Ser Leu
            20

        <210> 493
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 493
Tyr Thr Leu Ala Ser Leu Tyr His Arg Glu Lys Gln Val Phe Leu Pro
 1               5                  10                  15
```

```
Lys Tyr Arg Gly
            20

        <210> 494
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 494
Leu Pro Lys Tyr Arg Gly Asp Thr Gly Gly Ala Ser Ser Glu Asp Ser
1               5                   10                  15
Leu Met Ile Ser
            20

        <210> 495
        <211> 20
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 495
Asp Ser Leu Met Thr Ser Phe Leu Pro Gly Pro Lys Pro Gly Ala Pro
1               5                   10                  15
Phe Pro Asn Gly
            20

        <210> 496
        <211> 21
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 496
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1               5                   10                  15
Pro Pro Pro Ala
            20

        <210> 497
        <211> 20
        <212> PRT
        <213> Artificial Sequence
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<220>
<223> Made in a lab

<400> 497
Leu Leu Pro Pro Pro Pro Ala Leu Cys Gly Ala Ser Ala Cys Asp Val
1               5                   10                  15
Ser Val Arg Val
            20


<210> 498
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 498
Asp Val Ser Val Arg Val Val Val Gly Glu Pro Thr Glu Ala Arg Val
1               5                   10                  15
Val Pro Gly Arg
            20


<210> 499
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 499
Arg Val Val Pro Gly Arg Gly Ile Cys Leu Asp Leu Ala Ile Leu Asp
1               5                   10                  15
Ser Ala Phe Leu
            20


<210> 500
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 500
Leu Asp Ser Ala Phe Leu Leu Ser Gln Val Ala Pro Ser Leu Phe Met
1               5                   10                  15
Gly Ser Ile Val
            20
```

<210> 501
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 501
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val Thr Ala Tyr Met
1   5   10   15
Val Ser Ala Ala
            20

<210> 502
<211> 414
<212> DNA
<213> Homo Sapien

<400> 502
caccatggag acaggcctgc gctggctttt cctggtcgct gtgctcaaag gtgtccaatg   60
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ctgtagagtt tttggaatng acctcagtag caatgcaatg agctgggtcc gccaggctcc   180
agggaagggg ctggaatgga tcggagccat tgataattgt ccacantacg cgacctgggc   240
gaaaggccga ttnatnattt ccaaaacctn gaccacggtg gatttgaaaa tgaccagtcc   300
gacaaccgag gacacggcca cctatttttg tggcagaatg aatactggta atagtggttg   360
gaagaatatt tggggcccag gcaccctggt caccgtntcc tcagggcaac ctaa   414

<210> 503
<211> 379
<212> DNA
<213> Homo Sapien

<400> 503
atncgatggt gcttggtcaa aggtgtccag tgtcagtcgg tggaggagtc cggggggtcgc   60
ctggtcacgc ctgggacacc cctgacactc acctgcaccg tntctggatt ngacatcagt   120
agctatggag tgagctgggt ccgccaggct ccagggaagg ggctggnata catcggatca   180
ttagtagtag tggtacattt tacgcgagct gggcgaaagg ccgattcacc atttccaaaa   240
cctngaccac ggtggatttg aaaatcacca gtttgacaac cgaggacacg gccacctatt   300
tntgtgccag agggggggttt aattataaag acatttgggg cccaggcacc ctggtcaccg   360
tntccttagg gcaacctaa   379

<210> 504
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 504
Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp Ser Pro Tyr Phe Lys Glu
1   5   10   15
Asn Ser Ala

<210> 505
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 505
Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn Asp Asn Val Thr
1   5   10   15
Asn Thr Ala Asn
            20

<210> 506
<211> 407
<212> DNA
<213> Homo Sapien

<400> 506
atggagacag gcctgcgctg gcttctcctg gtcgctgcgc tcaaaggtgt ccagtgtcag   60
tcgctggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgc   120
accgtctctg gattctccct cagtagcaat gcaatgatct gggtccgcca ggctccaggg   180
aaggggctgg aatacatcgg atacattagt tatggtggta gcgcatacta cgcgagctgg   240
gtgaaaggcc gattcaccat ctccaaaacc tcgaccacgg tggatctgag aatgaccagt   300
ctgacaaccg aggacacggc cacctatttc tgtgccagaa atagtgattt tagtggtatg   360
ttgtggggcc caggcaccct ggtcaccgtc tcctcagggc aacctaa   407

<210> 507
<211> 422
<212> DNA
<213> Homo Sapien

<400> 507
atggagacag gcctgcgctg gcttctcctg gtcgctgtgc tcaaaggtgt ccagtgtcag   60
tcggtggagg agtccggggg tcgcctggtc acgcctggga cacccctgac actcacctgt   120
acagtctctg gattctccct cagcaactac gacctgaact gggtccgcca ggctccaggg   180
aaggggctgg aatggatcgg gatcattaat tatgttggta ggacggacta cgcgaactgg   240
gcaaaaggcc ggttcaccat ctccaaaacc tcgaccaccg tggatctcaa gatcgccagt   300
ccgacaaccg aggacacggc cacctatttc tgtgccagag ggtggaagtg cgatgagtct   360
ggtccgtgct tgcgcatctg gggcccaggc accctggtca ccgtctcctt agggcaacct   420
aa   422

<210> 508
<211> 411

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<212> DNA
<213> Homo Sapien

<400> 508
atggagacag gcctcgctgg cttctcctgg tcgctgtgct caaaggtgtc cagtgtcagt      60
cggtggagga gtccgggggt cgcctggtca cgcctgggac acccctgaca ctcacctgca     120
cagtctctgg aatcgacctc agtagctact gcatgagctg ggtccgccag gctccaggga     180
aggggctgga atggatcgga atcattggta ctcctggtga cacatactac gcgaggtggg     240
cgaaaggccg attcaccatc tccaaaacct cgaccacggt gcatntgaaa atcnccagtc     300
cgacaaccga ggacacggcc acctatttct gtgccagaga tcttcgggat ggtagtagta     360
ctggttatta taaaatctgg ggcccaggca ccctggtcac cgtctccttg g             411

<210> 509
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a ·lab

<400> 509
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
1               5                   10                  15

<210> 510
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 510
Pro Glu Tyr Asn Arg Pro Leu Leu Ala Asn Asp Leu Met Leu Ile
1               5                   10                  15

<210> 511
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 511

Tyr His Pro Ser Met Phe Cys Ala Gly Gly Gly Gln Asp Gln Lys
1               5                   10                  15

<210> 512
<211> 15
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<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 512
Asp Ser Gly Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu
1               5                   10                  15

<210> 513
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 513
Ala Pro Cys Gly Gln Val Gly Val Pro Asx Val Tyr Thr Asn Leu
1               5                   10                  15

<210> 514
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 514
Leu Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
1               5                   10                  15

<210> 515
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 515
Met Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg
1               5                   10                  15

<210> 516
<211> 15
<212> PRT
<213> Artificial Sequence
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        <220>
        <223> Made in a lab


        <400> 516
Val Ser Glu Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln
 1               5               10              15


        <210> 517
        <211> 15
        <212> PRT
        <213> Artificial Sequence    .


        <220>
        <223> Made in a lab


        <400> 517
Glu Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met
 1               5               10              15


        <210> 518
        <211> 15
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Made in a lab


        <400> 518
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg His Tyr Asp Glu Gly
 1               5               10              15


        <210> 519
        <211> 17
        <212> PRT
        <213> Artificial Sequence


        <220>
        <223> Made in a lab


        <400> 519
Arg Ala Glu Pro Gly Thr Glu Ala Arg Arg Asn Tyr Asp Glu Gly Cys
 1               5               10              15
Gly


        <210> 520
        <211> 25
        <212> PRT
        <213> Artificial Sequence


        <220>
```

<223> Made in a lab

<400> 520
Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly Thr
1   5   10   15
Glu Ala Arg Arg His Tyr Asp Glu Gly
            20   25

<210> 521
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 521
Ala Pro Phe Pro Asn Gly His Val Gly Ala Gly Gly Ser Gly Leu Leu
1   5   10   15
Pro Pro Pro Pro Ala
            20

<210> 522
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 522
Leu Leu Val Val Pro Ala Ile Lys Lys Asp Tyr Gly Ser Gln Glu Asp
1   5   10   15
Phe Thr Gln Val
            20

<210> 523
<211> 254
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<220>
<221> VARIANT
<222> (1)...(254)
<223> Xaa = any amino acid

<400> 523
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile

```
 1                    5                      10                      15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
                20                      25                      30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
            35                      40                      45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
        50                      55                      60
Trp Val Leu Ser Ala Thr His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
65                      70                      75                      80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                85                      90                      95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
            100                     105                     110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
            115                     120                     125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
            130                     135                     140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145                     150                     155                     160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
                165                     170                     175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
                180                     185                     190
Ala Gly Gly Gly Gln Xaa Gln Xaa Asp Ser Cys Asn Gly Asp Ser Gly
            195                     200                     205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
            210                     215                     220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225                     230                     235                     240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                245                     250
```

<210> 524
<211> 765
<212> DNA
<213> Homo sapien

<400> 524

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atggccacag caggaaatcc ctggggctgg ttcctggggt acctcatcct tggtgtcgca     60
ggatcgctcg tctctggtag ctgcagccaa atcataaacg cgaggactg cagcccgcac    120
tcgcagccct ggcaggcggc actggtcatg gaaaacgaat tgttctgctc gggcgtcctg    180
gtgcatccgc agtgggtgct gtcagccgca cactgtttcc agaactccta caccatcggg    240
ctgggcctgc acagtcttga ggccgaccaa gagccaggga ccagatggt ggaggccagc    300
ctctccgtac ggcacccaga gtacaacaga cccttgctcg ctaacgacct catgctcatc    360
aagttggacg aatccgtgtc cgagtctgac accatccgga gcatcagcat tgcttcgcag    420
tgccctaccg cggggaactc ttgcctcgtt tctggctggg gtctgctggc aacggcaga    480
atgcctaccg tgctgcagtg cgtgaacgtg tcggtggtgt ctgaggaggt ctgcagtaag    540
ctctatgacc cgctgtacca ccccagcatg ttctgcgccg cggagggca agaccagaag    600
gactcctgca acggtgactc tggggggccc ctgatctgca cgggtactt gcagggcctt    660
gtgtctttcg gaaaagcccc gtgtggccaa gttggcgtgc caggtgtcta caccaacctc    720
```

tgcaaattca ctgagtggat agagaaaacc gtccaggcca gttaa   765

<210> 525
<211> 254
<212> PRT
<213> Homo sapien

<400> 525
Met Ala Thr Ala Gly Asn Pro Trp Gly Trp Phe Leu Gly Tyr Leu Ile
  1   5   10   15
Leu Gly Val Ala Gly Ser Leu Val Ser Gly Ser Cys Ser Gln Ile Ile
             20   25   30
Asn Gly Glu Asp Cys Ser Pro His Ser Gln Pro Trp Gln Ala Ala Leu
         35   40   45
Val Met Glu Asn Glu Leu Phe Cys Ser Gly Val Leu Val His Pro Gln
     50   55   60
Trp Val Leu Ser Ala Ala His Cys Phe Gln Asn Ser Tyr Thr Ile Gly
 65   70   75   80
Leu Gly Leu His Ser Leu Glu Ala Asp Gln Glu Pro Gly Ser Gln Met
                 85   90   95
Val Glu Ala Ser Leu Ser Val Arg His Pro Glu Tyr Asn Arg Pro Leu
            100   105   110
Leu Ala Asn Asp Leu Met Leu Ile Lys Leu Asp Glu Ser Val Ser Glu
        115   120   125
Ser Asp Thr Ile Arg Ser Ile Ser Ile Ala Ser Gln Cys Pro Thr Ala
    130   135   140
Gly Asn Ser Cys Leu Val Ser Gly Trp Gly Leu Leu Ala Asn Gly Arg
145   150   155   160
Met Pro Thr Val Leu Gln Cys Val Asn Val Ser Val Val Ser Glu Glu
                165   170   175
Val Cys Ser Lys Leu Tyr Asp Pro Leu Tyr His Pro Ser Met Phe Cys
            180   185   190
Ala Gly Gly Gly Gln Asp Gln Lys Asp Ser Cys Asn Gly Asp Ser Gly
            195   200   205
Gly Pro Leu Ile Cys Asn Gly Tyr Leu Gln Gly Leu Val Ser Phe Gly
210   215   220
Lys Ala Pro Cys Gly Gln Val Gly Val Pro Gly Val Tyr Thr Asn Leu
225   230   235   240
Cys Lys Phe Thr Glu Trp Ile Glu Lys Thr Val Gln Ala Ser
                245   250

<210> 526
<211> 963
<212> DNA
<213> Homo sapiens

<400> 526
atgagttcct gcaacttcac acatgccacc tttgtgctta ttggtatccc aggattagag 60
aaagcccatt tctgggttgg cttcccctc ctttccatgt atgtagtggc aatgtttgga 120
aactgcatcg tggtcttcat cgtaaggacg gaacgcagcc tgcacgctcc gatgtacctc 180

```
tttctctgca tgcttgcagc cattgacctg gccttatcca catccaccat gcctaagatc 240
cttgcccttt tctggtttga ttcccgagag attagctttg aggcctgtct tacccagatg 300
ttctttattc atgccctctc agccattgaa tccaccatcc tgctggccat ggcctttgac 360
cgttatgtgg ccatctgcca cccactgcgc catgctgcag tgctcaacaa tacagtaaca 420
gcccagattg gcatcgtggc tgtggtccgc ggatccctct ttttttttccc actgcctctg 480
ctgatcaagc ggctggcctt ctgccactcc aatgtcctct cgcactccta ttgtgtccac 540
caggatgtaa tgaagttggc ctatgcagac actttgccca atgtggtata tggtcttact 600
gccattctgc tggtcatggg cgtggacgta atgttcatct ccttgtccta ttttctgata 660
atacgaacgg ttctgcaact gccttccaag tcagagcggg ccaaggcctt tggaacctgt 720
gtgtcacaca ttggtgtggt actcgccttc tatgtgccac ttattggcct ctcagttgta 780
caccgctttg gaaacagcct tcatcccatt gtgcgtgttg tcatgggtga catctacctg 840
ctgctgcctc ctgtcatcaa tcccatcatc tatggtgcca aaaccaaaca gatcagaaca 900
cgggtgctgg ctatgttcaa gatcagctgt gacaaggact gcaggctgt gggaggcaag 960
tga                                                            963
```

<210> 527
<211> 320
<212> PRT
<213> Homo sapiens

<400> 527

```
Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Val Leu Ile Gly Ile
                5                   10                  15

Pro Gly Leu Glu Lys Ala His Phe Trp Val Gly Phe Pro Leu Leu Ser
            20                  25                  30

Met Tyr Val Val Ala Met Phe Gly Asn Cys Ile Val Val Phe Ile Val
            35                  40                  45

Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
        50                  55                  60

Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
    65                  70                  75                  80

Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Ser Phe Glu Ala Cys
                85                  90                  95

Leu Thr Gln Met Phe Phe Ile His Ala Leu Ser Ala Ile Glu Ser Thr
                100                 105                 110

Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
            115                 120                 125

Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Ala Gln Ile Gly
        130                 135                 140

Ile Val Ala Val Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
145                 150                 155                 160
```

Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
            165   170   175

Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Ala Asp Thr Leu
            180   185   190

Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
        195   200   205

Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
    210   215   220

Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
225   230   235   240

Val Ser His Ile Gly Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
                245   250   255

Leu Ser Val Val His Arg Phe Gly Asn Ser Leu His Pro Ile Val Arg
            260   265   270

Val Val Met Gly Asp Ile Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
    275   280   285

Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
    290   295   300

Met Phe Lys Ile Ser Cys Asp Lys Asp Leu Gln Ala Val Gly Gly Lys
305   310   315   320

```
<210> 528
<211> 20
<212> DNA
<213> Homo Sapien

<400> 528
actatggtcc agaggctgtg                                              20

<210> 529
<211> 20
<212> DNA
<213> Homo Sapien

<400> 529
atcacctatg tgccgcctct                                              20

<210> 530
<211> 1852
<212> DNA
<213> Homo sapiens
```

<400> 530
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ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttcctctga gaactgcaac aataaataca aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctggggtgt ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytcctgtcc 360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcatctttc atttcctgca tttcttcctc cctggatgga caggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtggtg ctgccactgc ttcccctgct gcagggggag cggcaagagc 900
aacgtggtcg cttggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaatggcc 1320
aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtggtga attttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcatacttgc tgtatgttgt 1500
ggatcagcaa gtatagtcag ccctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacggtg ccgctgctgg caatggtgat ga        1852
```

<210> 531
<211> 879
<212> DNA
<213> Homo sapiens

<400> 531
```
atgcatcttt catttcctgc atttcttcct ccctggatgg acaggggggag cggcaagagc 60
aacgtgggca cttctggaga ccacaacgac tcctctgtga gacgcttggg gagcaagagg 120
tgcaagtggt gctgccactg cttcccctgc tgcaggggga gcggcaagag caacgtggtc 180
gcttgggggag actacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtggtg aaattttttaa tcaagaaaaa agcgaattta 720
```

```
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcatc atcatgtaa                        879
```

<210> 532
<211> 292
<212> PRT
<213> Homo sapiens

<400> 532

```
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
                  5                   10                  15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
              20                  25                  30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
          35                  40                  45

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
      50                  55                  60

Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
65                  70                  75                  80

Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
              85                  90                  95

Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
              100                 105                 110

Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
          115                 120                 125

Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
    130                 135                 140

Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
145                 150                 155                 160

Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
              165                 170                 175

Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
          180                 185                 190

Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu
          195                 200                 205

Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
    210                 215                 220
```

```
Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
225             230             235             240

Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
            245             250             255

Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
            260             265             270

Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu
        275             280             285

Val Ile Ile Met
    290
```

```
<210> 533
<211> 801
<212> DNA
<213> Homo sapiens

<400> 533
atgtacaagc ttcagtgcaa caactgtgct acaaatggag ccacagagag gaaacaagca 60
gcaggctcag gagcagggta tgcgctgcct tcggctctcc aatccatgcc tcagggctcc 120
tatgccactg cacgattctt ggttgccaag aggccaacca caggccatct tgagaaggag 180
tttatgttcc actgcagaaa gcagccagga tcaccatcca ggggacttgg tcttctgtgg 240
ccctggccag acatagaatt tgtgccaagg caggacaagc tcactcagag cagcgtgtta 300
gtacctcaaa tctgtgcgtg ccagacaagg ccaaactggc tcaatgagca accagccacc 360
tctgcagggg tgcgtctgga ggaggtggac cagccaccaa ccttacccag tcaaggaagt 420
ggatggccat gttcccacag cctgagtggc tgccacctga tggctgatat agcaaaggcc 480
ttaggaaaag cagatggccc ttggccctac cttttgtta gaagaactga tgttccatgt 540
cctgcagcga gtgaggttgg tggctgtgcc cccagctcct ggcacaccct cgcagaggtg 600
actggttgct ctttgagccc tcttagcctt gcccagcatg cacaagcctc agtgctacta 660
ctgtgctaca aatggagcca tagggggaa acgagcagcc atctcaggag caaggtgtat 720
gctgcctttg ggggctccag tccttgcctc aagggtctta tgtcactgtg ggcttcttgg 780
ttgccaagag gcagaccata g                                         801
```

```
<210> 534
<211> 266
<212> PRT
<213> Homo sapiens

<400> 534
Met Tyr Lys Leu Gln Cys Asn Asn Cys Ala Thr Asn Gly Ala Thr Glu
            5               10              15

Arg Lys Gln Ala Ala Gly Ser Gly Ala Gly Tyr Ala Leu Pro Ser Ala
        20              25              30

Leu Gln Ser Met Pro Gln Gly Ser Tyr Ala Thr Ala Arg Phe Leu Val
```

```
            35                      40                      45

Ala Lys Arg Pro Thr Thr Gly His Leu Glu Lys Glu Phe Met Phe His
        50                  55                  60

Cys Arg Lys Gln Pro Gly Ser Pro Ser Arg Gly Leu Gly Leu Leu Trp
65                  70                  75                      80

Pro Trp Pro Asp Ile Glu Phe Val Pro Arg Gln Asp Lys Leu Thr Gln
                85                  90                      95

Ser Ser Val Leu Val Pro Gln Ile Cys Ala Cys Gln Thr Arg Pro Asn
            100             105             110

Trp Leu Asn Glu Gln Pro Ala Thr Ser Ala Gly Val Arg Leu Glu Glu
            115             120             125

Val Asp Gln Pro Pro Thr Leu Pro Ser Gln Gly Ser Gly Trp Pro Cys
    130             135             140

Ser His Ser Leu Ser Gly Cys His Leu Met Ala Asp Ile Ala Lys Ala
145             150             155             160

Leu Gly Lys Ala Asp Gly Pro Trp Pro Tyr Leu Phe Val Arg Arg Thr
            165             170             175

Asp Val Pro Cys Pro Ala Ala Ser Glu Val Gly Gly Cys Ala Pro Ser
            180             185             190

Ser Trp His Thr Leu Ala Glu Val Thr Gly Cys Ser Leu Ser Pro Leu
        195             200             205

Ser Leu Ala Gln His Ala Gln Ala Ser Val Leu Leu Leu Cys Tyr Lys
    210             215             220

Trp Ser His Ile Gly Glu Thr Ser Ser His Leu Arg Ser Lys Val Tyr
225             230             235             240

Ala Ala Phe Gly Gly Ser Ser Pro Cys Leu Lys Gly Leu Met Ser Leu
            245             250             255

Trp Ala Ser Trp Leu Pro Arg Gly Arg Pro
            260             265
```

<210> 535
<211> 6082
<212> DNA
<213> Homo sapiens

<400> 535

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cggagcccgc ggccactgcc gcctgatcag cgcgaccccg gcccgcgccc gccccgcccg 180
gcaagatgct gcccgtgtac caggaggtga agcccaaccc gctgcaggac gcgaacctct 240
gctcacgcgt gttcttctgg tggctcaatc ccttgtttaa aattggccat aaacggagat 300
tagaggaaga tgatatgtat tcagtgctgc cagaagaccg ctcacagcac cttggagagg 360
agttgcaagg gttctgggat aaagaagttt taagagctga gaatgacgca cagaagcctt 420
ctttaacaag agcaatcata aagtgttact ggaaatctta tttagttttg ggaattttta 480
cgttaattga ggaaagtgcc aaagtaatcc agcccatatt tttgggaaaa attattaatt 540
attttgaaaa ttatgatccc atggattctg tggctttgaa cacagcgtac gcctatgcca 600
cggtgctgac tttttgcacg ctcatttTgg ctatactgca tcacttatat ttttatcacg 660
ttcagtgtgc tgggatgagg ttacgagtag ccatgtgcca tatgatttat cggaaggcac 720
ttcgtcttag taacatggcc atggggaaga caaccacagg ccagatagtc aatctgctgt 780
ccaatgatgt gaacaagttt gatcaggtga cagtgttctt acacttcctg tgggcaggac 840
cactgcaggc gatcgcagtg actgccctac tctggatgga gataggaata tcgtgccttg 900
ctgggatggc agttctaatc attctcctgc ccttgcaaag ctgttttggg aagttgttct 960
catcactgag gagtaaaact gcaactttca cggatgccag gatcaggacc atgaatgaag 1020
ttataactgg tataaggata ataaaaatgt acgcctggga aaagtcattt tcaaatctta 1080
ttaccaattt gagaaagaag gagatttcca agattctgag aagttcctgc ctcaggggga 1140
tgaatttggc ttcgtttttc agtgcaagca aaatcatcgt gtttgtgacc ttcaccacct 1200
acgtgctcct cggcagtgtg atcacagcca gccgcgtgtt cgtggcagtg acgctgtatg 1260
gggctgtgcg gctgacggtt accctcttct tcccctcagc cattgagagg gtgtcagagg 1320
caatcgtcag catccgaaga atccagacct ttttgctact tgatgagata tcacagcgca 1380
accgtcagct gccgtcagat ggtaaaaaga tggtgcatgt gcaggatttt actgcttttt 1440
gggataaggc atcagagacc ccaactctac aaggcctttc ctttactgtc agacctggcg 1500
aattgttagc tgtggtcggc cccgtgggag cagggaagtc atcactgtta agtgccgtgc 1560
tcgggggaatt ggccccaagt cacgggctgg tcagcgtgca tggaagaatt gcctatgtgt 1620
ctcagcagcc ctgggtgttc tcgggaactc tgaggagtaa tatttatttt gggaagaaat 1680
acgaaaagga acgatatgaa aaagtcataa aggcttgtgc tctgaaaaag gatttacagc 1740
tgttggagga tggtgatctg actgtgatag gagatcgggg aaccacgctg agtggagggc 1800
agaaagcacg ggtaaacctt gcaagagcag tgtatcaaga tgctgacatc tatctcctgg 1860
acgatcctct cagtgcagta gatgcggaag ttagcagaca cttgttcgaa ctgtgtattt 1920
gtcaaatttt gcatgagaag atcacaattt tagtgactca tcagttgcag tacctcaaag 1980
ctgcaagtca gattctgata ttgaaagatg gtaaaatggt gcagaagggg acttacactg 2040
agttcctaaa atctggtata gattttggct cccttttaaa gaaggataat gaggaaagtg 2100
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Ile Gly His Lys Arg Arg Leu Glu Glu Asp Asp Met Tyr Ser Val Leu
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Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu Leu Gln Gly Phe Trp
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Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala Gln Lys Pro Ser Leu
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Thr Arg Ala Ile Ile Lys Cys Tyr Trp Lys Ser Tyr Leu Val Leu Gly
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Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val Ile Gln Pro Ile Phe
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Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr Asp Pro Met Asp Ser
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Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr Val Leu Thr Phe Cys
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Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys His Met Ile Tyr Arg
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Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile Ser Cys Leu Ala Gly
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Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln Ser Cys Phe Gly Lys
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Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr Phe Thr Asp Ala Arg
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Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile Arg Ile Ile Lys Met
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Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile Thr Asn Leu Arg Lys
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Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys Leu Arg Gly Met Asn
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Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr Ala Ser Arg Val Phe
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Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu Thr Val Thr Leu Phe
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Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile Ser Gln Arg Asn Arg
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Gln Leu Pro Ser Asp Gly Lys Lys Met Val His Val Gln Asp Phe Thr
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Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr Leu Gln Gly Leu Ser
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Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val Val Gly Pro Val Gly
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Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser Asn Ile Leu Phe Gly
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Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val Ile Lys Ala Cys Ala
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Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly Asp Leu Thr Val Ile
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Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln Lys Ala Arg Val Asn
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Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg His Leu Phe Glu Leu
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Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr Ile Leu Val Thr His
            580                 585                 590

Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile Leu Ile Leu Lys Asp
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Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu Phe Leu Lys Ser Gly
    610                 615                 620

Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn Glu Glu Ser Glu Gln
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Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn Arg Thr Phe Ser Glu
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Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro Ser Leu Lys Asp Gly
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Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro Val Thr Leu Ser Glu
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Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln Ala Tyr Lys Asn Tyr
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Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile Phe Leu Ile Leu Leu
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Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp Tyr Leu Gly Ile Tyr
            755                    760                    765

Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly Ile Ala Arg Ser Leu
    770                    775                    780

Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln Thr Leu His Asn Lys
785                    790                    795                    800

Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu Phe Phe Asp Arg Asn
            805                    810                    815

Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys Asp Ile Gly His Leu
            820                    825                    830

Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe Ile Gln Thr Leu Leu
            835                    840                    845

Gln Val Val Gly Val Val Ser Val Ala Val Ala Val Ile Pro Trp Ile
    850                    855                    860

Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe Ile Phe Leu Arg Arg
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Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg Leu Glu Ser Thr Thr
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Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser Leu Gln Gly Leu Trp
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Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys Gln Glu Leu Phe Asp
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Ala His Gln Asp Leu His Ser Glu Ala Trp Phe Leu Phe Leu Thr Thr
            930                    935                    940

Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile Cys Ala Met Phe Val
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Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala Lys Thr Leu Asp Ala
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Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu Thr Leu Met Gly Met
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        995                  1000                 1005

Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu Glu Lys Glu Ala Pro
       1010                  1015                 1020

Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp Pro His Glu Gly Val
1025                  1030                 1035                 1040

Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser Pro Gly Gly Pro Leu
              1045                 1050                 1055

Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser Gln Glu Lys Val Gly
          1060                 1065                 1070

Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser Leu Ile Ser Ala Leu
          1075                 1080                 1085

Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp Ile Asp Lys Ile Leu
       1090                  1095                 1100

Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys Lys Met Ser Ile Ile
1105                  1110                 1115                 1120

Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met Arg Lys Asn Leu Asp
              1125                 1130                 1135

Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp Asn Ala Leu Gln Glu
              1140                 1145                 1150

Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro Gly Lys Met Asp Thr
          1155                 1160                 1165

Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val Gly Gln Arg Gln Leu
          1170                 1175                 1180

Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn Gln Ile Leu Ile Ile
1185                  1190                 1195                 1200

Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr Asp Glu Leu Ile Gln
              1205                 1210                 1215

Lys Lys Ser Gly Arg Asn Leu Pro Thr Ala Pro Cys
          1220                 1225
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<210> 538
<211> 1261
<212> PRT
<213> Homo sapiens

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<400> 538
Met Tyr Ser Val Leu Pro Glu Asp Arg Ser Gln His Leu Gly Glu Glu
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Leu Gln Gly Phe Trp Asp Lys Glu Val Leu Arg Ala Glu Asn Asp Ala
            20                  25                  30

Gln Lys Pro Ser Leu Thr Arg. Ala Ile Ile Lys Cys Tyr Trp Lys Ser
        35                  40                  45

Tyr Leu Val Leu Gly Ile Phe Thr Leu Ile Glu Glu Ser Ala Lys Val
    50                  55                  60

Ile Gln Pro Ile Phe Leu Gly Lys Ile Ile Asn Tyr Phe Glu Asn Tyr
65                  70                  75                  80

Asp Pro Met Asp Ser Val Ala Leu Asn Thr Ala Tyr Ala Tyr Ala Thr
                85                  90                  95

Val Leu Thr Phe Cys Thr Leu Ile Leu Ala Ile Leu His His Leu Tyr
            100                 105                 110

Phe Tyr His Val Gln Cys Ala Gly Met Arg Leu Arg Val Ala Met Cys
        115                 120                 125

His Met Ile Tyr Arg Lys Ala Leu Arg Leu Ser Asn Met Ala Met Gly
    130                 135                 140

Lys Thr Thr Thr Gly Gln Ile Val Asn Leu Leu Ser Asn Asp Val Asn
145                 150                 155                 160

Lys Phe Asp Gln Val Thr Val Phe Leu His Phe Leu Trp Ala Gly Pro
            165                 170                 175

Leu Gln Ala Ile Ala Val Thr Ala Leu Leu Trp Met Glu Ile Gly Ile
            180                 185                 190

Ser Cys Leu Ala Gly Met Ala Val Leu Ile Ile Leu Leu Pro Leu Gln
        195                 200                 205

Ser Cys Phe Gly Lys Leu Phe Ser Ser Leu Arg Ser Lys Thr Ala Thr
    210                 215                 220

Phe Thr Asp Ala Arg Ile Arg Thr Met Asn Glu Val Ile Thr Gly Ile
225                 230                 235                 240

Arg Ile Ile Lys Met Tyr Ala Trp Glu Lys Ser Phe Ser Asn Leu Ile
            245                 250                 255

Thr Asn Leu Arg Lys Lys Glu Ile Ser Lys Ile Leu Arg Ser Ser Cys
```

```
                260                    265                    270

  Leu Arg Gly Met Asn Leu Ala Ser Phe Phe Ser Ala Ser Lys Ile Ile
          275                 280                 285

  Val Phe Val Thr Phe Thr Thr Tyr Val Leu Leu Gly Ser Val Ile Thr
          290                 295                 300

  Ala Ser Arg Val Phe Val Ala Val Thr Leu Tyr Gly Ala Val Arg Leu
  305                 310                 315                 320

  Thr Val Thr Leu Phe Phe Pro Ser Ala Ile Glu Arg Val Ser Glu Ala
                  325                 330                 335

  Ile Val Ser Ile Arg Arg Ile Gln Thr Phe Leu Leu Leu Asp Glu Ile
                  340                 345                 350

  Ser Gln Arg Asn Arg Gln Leu Pro Ser Asp Gly Lys Lys Met Val His
          355                 360                 365

  Val Gln Asp Phe Thr Ala Phe Trp Asp Lys Ala Ser Glu Thr Pro Thr
          370                 375                 380

  Leu Gln Gly Leu Ser Phe Thr Val Arg Pro Gly Glu Leu Leu Ala Val
  385                 390                 395                 400

  Val Gly Pro Val Gly Ala Gly Lys Ser Ser Leu Leu Ser Ala Val Leu
                  405                 410                 415

  Gly Glu Leu Ala Pro Ser His Gly Leu Val Ser Val His Gly Arg Ile
                  420                 425                 430

  Ala Tyr Val Ser Gln Gln Pro Trp Val Phe Ser Gly Thr Leu Arg Ser
                  435                 440                 445

  Asn Ile Leu Phe Gly Lys Lys Tyr Glu Lys Glu Arg Tyr Glu Lys Val
          450                 455                 460

  Ile Lys Ala Cys Ala Leu Lys Lys Asp Leu Gln Leu Leu Glu Asp Gly
  465                 470                 475                 480

  Asp Leu Thr Val Ile Gly Asp Arg Gly Thr Thr Leu Ser Gly Gly Gln
                  485                 490                 495

  Lys Ala Arg Val Asn Leu Ala Arg Ala Val Tyr Gln Asp Ala Asp Ile
                  500                 505                 510

  Tyr Leu Leu Asp Asp Pro Leu Ser Ala Val Asp Ala Glu Val Ser Arg
          515                 520                 525

  His Leu Phe Glu Leu Cys Ile Cys Gln Ile Leu His Glu Lys Ile Thr
```

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        530                    535                   540

Ile Leu Val Thr His Gln Leu Gln Tyr Leu Lys Ala Ala Ser Gln Ile
545                 550               555                 560

Leu Ile Leu Lys Asp Gly Lys Met Val Gln Lys Gly Thr Tyr Thr Glu
                565               570               575

Phe Leu Lys Ser Gly Ile Asp Phe Gly Ser Leu Leu Lys Lys Asp Asn
            580               585               590

Glu Glu Ser Glu Gln Pro Pro Val Pro Gly Thr Pro Thr Leu Arg Asn
        595               600               605

Arg Thr Phe Ser Glu Ser Ser Val Trp Ser Gln Gln Ser Ser Arg Pro
    610               615               620

Ser Leu Lys Asp Gly Ala Leu Glu Ser Gln Asp Thr Glu Asn Val Pro
625               630               635               640

Val Thr Leu Ser Glu Glu Asn Arg Ser Glu Gly Lys Val Gly Phe Gln
            645               650               655

Ala Tyr Lys Asn Tyr Phe Arg Ala Gly Ala His Trp Ile Val Phe Ile
        660               665               670

Phe Leu Ile Leu Leu Asn Thr Ala Ala Gln Val Ala Tyr Val Leu Gln
        675               680               685

Asp Trp Trp Leu Ser Tyr Trp Ala Asn Lys Gln Ser Met Leu Asn Val
    690               695               700

Thr Val Asn Gly Gly Gly Asn Val Thr Glu Lys Leu Asp Leu Asn Trp
705               710               715               720

Tyr Leu Gly Ile Tyr Ser Gly Leu Thr Val Ala Thr Val Leu Phe Gly
            725               730               735

Ile Ala Arg Ser Leu Leu Val Phe Tyr Val Leu Val Asn Ser Ser Gln
            740               745               750

Thr Leu His Asn Lys Met Phe Glu Ser Ile Leu Lys Ala Pro Val Leu
        755               760               765

Phe Phe Asp Arg Asn Pro Ile Gly Arg Ile Leu Asn Arg Phe Ser Lys
    770               775               780

Asp Ile Gly His Leu Asp Asp Leu Leu Pro Leu Thr Phe Leu Asp Phe
785               790               795               800

Ile Gln Thr Leu Leu Gln Val Val Gly Val Val Ser Val Ala Val Ala
```

```
                   805                      810                      815
Val Ile Pro Trp Ile Ala Ile Pro Leu Val Pro Leu Gly Ile Ile Phe
            820                 825                 830

Ile Phe Leu Arg Arg Tyr Phe Leu Glu Thr Ser Arg Asp Val Lys Arg
            835                 840                 845

Leu Glu Ser Thr Thr Arg Ser Pro Val Phe Ser His Leu Ser Ser Ser
        850                 855                 860

Leu Gln Gly Leu Trp Thr Ile Arg Ala Tyr Lys Ala Glu Glu Arg Cys
865                 870                 875                 880

Gln Glu Leu Phe Asp Ala His Gln Asp Leu His Ser Glu Ala Trp Phe
                885                 890                 895

Leu Phe Leu Thr Thr Ser Arg Trp Phe Ala Val Arg Leu Asp Ala Ile
            900                 905                 910

Cys Ala Met Phe Val Ile Ile Val Ala Phe Gly Ser Leu Ile Leu Ala
            915                 920                 925

Lys Thr Leu Asp Ala Gly Gln Val Gly Leu Ala Leu Ser Tyr Ala Leu
        930                 935                 940

Thr Leu Met Gly Met Phe Gln Trp Cys Val Arg Gln Ser Ala Glu Val
945                 950                 955                 960

Glu Asn Met Met Ile Ser Val Glu Arg Val Ile Glu Tyr Thr Asp Leu
                965                 970                 975

Glu Lys Glu Ala Pro Trp Glu Tyr Gln Lys Arg Pro Pro Pro Ala Trp
            980                 985                 990

Pro His Glu Gly Val Ile Ile Phe Asp Asn Val Asn Phe Met Tyr Ser
            995                 1000                1005

Pro Gly Gly Pro Leu Val Leu Lys His Leu Thr Ala Leu Ile Lys Ser
    1010                1015                1020

Gln Glu Lys Val Gly Ile Val Gly Arg Thr Gly Ala Gly Lys Ser Ser
1025                1030                1035                1040

Leu Ile Ser Ala Leu Phe Arg Leu Ser Glu Pro Glu Gly Lys Ile Trp
            1045                1050                1055

Ile Asp Lys Ile Leu Thr Thr Glu Ile Gly Leu His Asp Leu Arg Lys
            1060                1065                1070

Lys Met Ser Ile Ile Pro Gln Glu Pro Val Leu Phe Thr Gly Thr Met
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```
        1075                1080                1085

Arg Lys Asn Leu Asp Pro Phe Asn Glu His Thr Asp Glu Glu Leu Trp
    1090                1095                1100
                                                  .

Asn Ala Leu Gln Glu Val Gln Leu Lys Glu Thr Ile Glu Asp Leu Pro
1105                1110                1115                1120

Gly Lys Met Asp Thr Glu Leu Ala Glu Ser Gly Ser Asn Phe Ser Val
                1125                1130                1135

Gly Gln Arg Gln Leu Val Cys Leu Ala Arg Ala Ile Leu Arg Lys Asn
            1140                1145                1150

Gln Ile Leu Ile Ile Asp Glu Ala Thr Ala Asn Val Asp Pro Arg Thr
            1155                1160                1165

Asp Glu Leu Ile Gln Lys Lys Ile Arg Glu Lys Phe Ala His Cys Thr
        1170                1175                1180

Val Leu Thr Ile Ala His Arg Leu Asn Thr Ile Ile Asp Ser Asp Lys
1185                1190                1195                1200

Ile Met Val Leu Asp Ser Gly Arg Leu Lys Glu Tyr Asp Glu Pro Tyr
                1205                1210                1215

Val Leu Leu Gln Asn Lys Glu Ser Leu Phe Tyr Lys Met Val Gln Gln
            1220                1225                1230

Leu Gly Lys Ala Glu Ala Ala Ala Leu Thr Glu Thr Ala Lys Gln Arg
        1235                1240                1245

Trp Gly Phe Thr Met Leu Ala Arg Leu Val Ser Asn Ser
    1250                1255                1260
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<210> 539
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Made in a lab

<400> 539
Cys Leu Ser His Ser Val Ala Val Val Thr
1               5               10

<210> 540
<211> 9
<212> PRT
<213> Artificial Sequence
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<220>
<223> Made in a lab

<400> 540
Ala Val Val Thr Ala Ser Ala Ala Leu
 1   5

<210> 541
<211> 14
<212> PRT
<213> Homo sapiens

<400> 541
Leu Ala Gly Leu Leu Cys Pro Asp Pro Arg Pro Leu Glu Leu
                  5   10

<210> 542
<211> 15
<212> PRT
<213> Homo sapiens

<400> 542
Thr Gln Val Val Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
                  5   10   15

<210> 543
<211> 12
<212> PRT
<213> Homo sapiens

<400> 543
Phe Met Gly Ser Ile Val Gln Leu Ser Gln Ser Val
                  5   10

<210> 544
<211> 18
<212> PRT
<213> Homo sapiens

<400> 544
Thr Tyr Val Pro Pro Leu Leu Leu Glu Val Gly Val Glu Glu Lys Phe
                  5   10   15

Met Thr

<210> 545
<211> 18
<212> PRT
<213> Homo sapiens

<400> 545
Met Asp Arg Leu Val Gln Arg Phe Gly Thr Arg Ala Val Tyr Leu Ala
                5   10   15

Ser Val

<210> 546
<211> 29
<212> PRT
<213> Homo sapiens

<400> 546
Phe Val Gly Glu Gly Leu Tyr Gln Gly Val Pro Arg Ala Glu Pro Gly
                5   10   15

Thr Glu Ala Arg Arg His Tyr Asp Glu Gly Val Arg Met
            20   25

<210> 547
<211> 58
<212> PRT
<213> Homo sapiens

<400> 547
Val Ala Glu Glu Ala Ala Leu Gly Pro Thr Glu Pro Ala Glu Gly Leu
                5   10   15

Ser Ala Pro Ser Leu Ser Pro His Cys Cys Pro Cys Arg Ala Arg Leu
            20   25   30

Ala Phe Arg Asn Leu Gly Ala Leu Leu Pro Arg Leu His Gln Leu Cys
        35   40   45

Cys Arg Met Pro Arg Thr Leu Arg Arg Leu
    50   55

<210> 548
<211> 18
<212> PRT
<213> Homo sapiens

<400> 548

Ile Asp Trp Asp Thr Ser Ala Leu Ala Pro Tyr Leu Gly Thr Gln Glu
                5   10   15

Glu Cys

<210> 549
<211> 18
<212> PRT
<213> Homo sapiens

<400> 549
Leu Glu Ala Leu Leu Ser Asp Leu Phe Arg Asp Pro Asp His Cys Arg
                5   10   15

Gln Ala

<210> 550
<211> 14
<212> PRT
<213> Homo sapiens

<400> 550
Ser Asp His Trp Arg Gly Arg Tyr Gly Arg Arg Arg Pro Phe
                5   10

        <210> 551
        <211> 11
        <212> PRT
        <213> Artificial Sequence

        <220>
        <223> Made in a lab

        <400> 551
 Phe Asp Lys Ser Asp Leu Ala Lys Tyr Ser Ala
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<210> 552
<211> 2577
<212> DNA
<213> Homo sapiens

<400> 552
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tcataccagt ccacggacta ttatgaacca caccacacag gaggaggtga gcactaggca 180

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agccaaggaa gcttcacctg tacttacagc cacacgccat ggctcatatt acagcctgaa 240
ctctgcctcc actcagatca gtgataacat tagaaactca ttggagcacg aaccctgttg 300
tgaactgcct atccgaagga tctaggttgt gtgcttcgta tgagaatcta atgccagatg 360
atctatcatt gtctcacttt gcccccagat aagaccatct agttgcagaa aaataagctc 420
agagcttcca ctgattctac attatggata tgtgccgccg aagcaagcac aaagccctac 480
ttttacacat gcctagtgat gcttcatgga caaggcttgg ctctgttgag tccaactaac 540
ctacctgaga ttctgagatt tctcttcaat ggcttcctgt gagctagagt ttgaaaatat 600
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caaaggatct cttaccatga aggtctcagc taattcttgg ctaagatgtg ggttccacat 960
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agttaggaat taaacccagt attgtgtgaa tctaaagcct aacttttttc tctttatcac 2520
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<210> 553
<211> 58
<212> PRT
<213> Homo sapiens

<400> 553
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
           5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly

                    20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 554
<211> 58
<212> PRT
<213> Homo sapiens

<400> 554
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 555
<211> 58
<212> PRT
<213> Homo sapiens

<400> 555
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 556
<211> 58
<212> PRT
<213> Homo sapiens

<400> 556
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 557
<211> 58
<212> PRT
<213> Homo sapiens

<400> 557
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 558
<211> 58
<212> PRT
<213> Homo sapiens

<400> 558
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 559
<211> 58
<212> PRT
<213> Homo sapiens

<400> 559
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                    5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
            35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
        50   55

<210> 560
<211> 58
<212> PRT
<213> Homo sapiens

<400> 560
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                    5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
            35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
        50   55

<210> 561
<211> 58
<212> PRT
<213> Homo sapiens

<400> 561
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                    5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 562
<211> 58
<212> PRT
<213> Homo sapiens

<400> 562
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 563
<211> 58
<212> PRT
<213> Homo sapiens

<400> 563
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 564
<211> 58
<212> PRT
<213> Homo sapiens

<400> 564
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
            35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
        50   55

<210> 565
<211> 58
<212> PRT
<213> Homo sapiens

<400> 565
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
            35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
        50   55

<210> 566
<211> 58
<212> PRT
<213> Homo sapiens

<400> 566
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
                20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
            35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
        50   55

<210> 567
<211> 58
<212> PRT
<213> Homo sapiens

<400> 567
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 568
<211> 58
<212> PRT
<213> Homo sapiens

<400> 568
Ser Ile Cys Asn Met Thr Cys Ala Ser Val Phe Phe Cys Asp Gln Lys
                5   10   15

Phe Leu Thr Phe Ser Phe Leu Ser Met Val Glu Pro Pro Arg Ala Gly
            20   25   30

Val Leu Asn Ser Gln Ala Thr Asp Ser Tyr Gln Ser Thr Asp Tyr Tyr
        35   40   45

Glu Pro His His Thr Gly Gly Gly Glu His
    50   55

<210> 569
<211> 4809
<212> DNA
<213> Homo sapiens

<400> 569
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ggacagatgt ccgataatcc tttttacatt ttggcatcct gggtagctc gtcttgtagg 180
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<210> 570
<211> 951
<212> DNA
<213> Homo sapiens

<400> 570
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ccattttagt actatgggtg agtacatgga attgaagtct ggcttaaatc ttcagaaagt 180
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aggagagaac gagtgagggg ggagactgcc acaaactttt ttttttgag acaagagtct 660
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<210> 571
<211> 819
<212> DNA
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<213> Homo sapiens

<400> 571
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cctgggaggc tgagggagga gaatcgcttg aacccgggag gcagaggttg cagtgaaccg 720
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aaataaacaa acaaacaaac aaaacagaga gattttgct 819

<210> 572
<211> 203
<212> DNA
<213> Homo sapiens

<400> 572
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attgtgttgg gcccaacaca atggagccac cacatccagc ctgccacata cttttaaact 180
atcaggtctc atgagaactc atg 203

<210> 573
<211> 132
<212> PRT
<213> Homo sapiens

<400> 573
Met Val Glu Gly Glu Gly Glu Ala Arg His Val Leu His Gly Gly Arg
                5   10   15

Arg Glu Arg Val Arg Gly Glu Thr Ala Thr Asn Phe Phe Phe Leu Arg
                20   25   30

Gln Glu Ser Gly Pro Val Ala Gln Ala Gly Val Gln Trp His Asp Leu
            35   40   45

Ser Ser Leu Gln Pro Leu Pro His Arg Phe Lys Gln Phe Ser Cys Leu
        50   55   60

Ser Leu Pro His Ser Trp Asp His Arg Tyr Ala Pro Pro His Leu Ala
    65   70   75   80

Asn Phe Cys Ser Phe Ser Arg Asp Gly Val Ser Leu Cys Cys Ser Gly

```
                    85                      90                      95

Trp Ser Lys Thr Pro Gly Leu Gln Gln Ser Ala Cys Leu Gly Leu Pro
            100                 105                 110

Lys Cys Trp Gly Tyr Arg His Lys Pro Pro His Pro Ala Cys His Ile
            115                 120                 125

Leu Leu Asn Tyr
            130


<210> 574
<211> 62
<212> PRT
<213> Homo sapiens


<400> 574
Met Thr His Ser Ser Ala Trp Leu Glu Arg Pro Gln Glu Thr Tyr Asn
                    5                   10                  15

His Gly Gly Arg Arg Arg Gly Ser Lys Ala Arg Leu Thr Trp Trp Gln
                20                  25                  30

Glu Arg Thr Ser Glu Gly Gly Asp Cys His Lys Leu Phe Phe Phe Glu
            35                  40                  45

Thr Arg Val Trp Pro Cys Cys Pro Gly Trp Ser Ala Val Ala
        50                  55                  60


<210> 575
<211> 76
<212> PRT
<213> Homo sapiens


<400> 575
Met Val Lys Ser Arg Phe Thr Lys Asn Thr Lys Ile Thr Gln Ala Trp
                5                   10                  15

Trp Arg Ala Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Gly Gly Glu
            20                  25                  30

Ser Leu Glu Pro Gly Arg Leu Arg Glu Glu Asn Arg Leu Asn Pro Gly
            35                  40                  45

Gly Arg Gly Cys Ser Glu Pro Arg Ser Cys Cys Cys Thr Pro Ala Trp
        50                  55                  60

Ser Thr Glu Gln Asp Ser Ala Ser Lys Thr Asn Lys
65                  70                  75
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<210> 576
<211> 68
<212> PRT
<213> Homo sapiens

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<223> Xaa = any amino acid

<400> 576
Met Leu Gly Lys Ser Arg Ala Val Cys Leu Pro Ser Thr Thr Val Thr
                  5   10   15

Thr Val Cys Tyr Leu Ala Ser Ser Ser Ala Ser Arg Glu Thr Ala Thr
                20   25   30

Arg Gln Ala Pro Gly Asn Trp Lys Met Xaa Ser Lys Cys His Ala Gln
            35   40   45

Leu Leu Phe Thr Phe Tyr Leu Asn His Phe Tyr Gln Ile Arg Leu Asn
        50   55   60

Pro Gly Tyr Ser
65

<210> 577
<211> 57
<212> PRT
<213> Homo sapiens

<400> 577
Met Tyr Leu Glu Asn Ser Phe Tyr Cys Gln Met Ile Leu Leu Lys Arg
                  5   10   15

Cys Arg Leu Ser Lys Ile Ser Thr Gln Arg Val Val Pro Asp Gly Pro
                20   25   30

Pro Ala Pro Val Pro Gly Ser Phe Pro Met Phe Pro Arg Phe Gly Phe
            35   40   45

Arg Leu Ala Pro Pro Ala Asp Thr Pro
        50   55

<210> 578
<211> 51
<212> PRT

<213> Homo sapiens

<400> 578
Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu Leu Tyr Ile Arg His
              5   10   15

His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr Lys Lys Leu Asn Tyr
             20   25   30

Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His Ile Ala Lys Val Tyr
         35   40   45

Gln Pro His
     50

<210> 579
<211> 56
<212> PRT
<213> Homo sapiens

<400> 579
Met His Phe Thr Phe Met Gln Leu Ile Tyr Leu Cys Phe Leu Gly Leu
              5   10   15

Leu Tyr Ile Arg His His Asp Ser Gln Ser Phe Val Ile Leu Tyr Tyr
             20   25   30

Lys Lys Leu Asn Tyr Tyr Phe Lys Tyr Gly Gln Ile Arg Ala Phe His
         35   40   45

Ile Ala Lys Val Tyr Gln Pro His
     50   55

<210> 580
<211> 67
<212> PRT
<213> Homo sapiens

<400> 580
Met Glu Leu Arg Thr Lys Ala Leu Arg Thr Ala Gln Gln Leu Thr Ser
              5   10   15

Cys Val Thr Ala Leu Lys Ala Ala Gly Pro Pro Leu Thr Phe Trp Lys
             20   25   30

Gly Lys Trp Val Gln Cys Cys Leu Pro Leu Trp Gly Leu Leu Gly Ser
         35   40   45

His Ala Phe Tyr Ile Tyr Ala Val Asp Ile Phe Met Phe Pro Gly Ser

```
        50                    55                     60

Phe Ile His
65
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<210> 581
<211> 77
<212> PRT
<213> Homo sapiens

<400> 581
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Met Leu Glu Val Lys Phe Glu Val Ser Leu Arg Pro Thr Gly Asn Glu
                  5                  10                  15

Thr Ala Gly Gln Thr His Gly Thr Gln Asp Lys Gly Ser Lys Asp Ser
              20                  25                  30

Thr Ala Ala Asp Ile Leu Cys Asp Ser Leu Glu Ser Ser Arg Pro Ala
          35                  40                  45

Ala His Ile Leu Glu Gly Lys Met Gly Thr Met Leu Ser Ala Thr Leu
      50                  55                  60

Gly Pro Ser Trp Val Thr Cys Ile Leu His Leu Cys Ser
65                  70                  75
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<210> 582
<211> 51
<212> PRT
<213> Homo sapiens

<400> 582
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Met Leu Phe Leu Gln Thr Ile Asp Thr Lys Cys Thr Gly Ile Glu Ile
                  5                  10                  15

Asn Arg Asn Trp Ser Lys Val Trp His Thr His Ser His Val Asp Val
              20                  25                  30

Lys Leu Cys Leu Glu Phe Leu Cys Gly Val Trp Phe Gly Leu Gly Phe
          35                  40                  45

Leu Gly Val
      50
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<210> 583
<211> 60
<212> PRT
<213> Homo sapiens

<400> 583
Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Gln Leu Gly Ser Arg
                5   10   15

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
                20   25   30

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
            35   40   45

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
        50   55   60

<210> 584
<211> 76
<212> PRT
<213> Homo sapiens

<400> 584
Met Cys Leu Cys Ile Pro Leu Gly Gly Tyr Gln Glu Leu Cys His Cys
                5   10   15

Met Ser Thr Ser Asp Gly Phe Ala Pro Pro Pro Gln Leu Gly Ser Arg
                20   25   30

Cys Ser His Ile Arg Gly Pro Ile Lys Ile Ala Arg Asn Lys Phe Pro
            35   40   45

Arg Thr Leu Thr Ser Gln Glu Leu Arg Arg Phe Ala Glu Tyr Ser Gly
        50   55   60

Met Met Phe Gly Asp Gln Thr Thr Ala Gly Gln Lys
65   70   75

<210> 585
<211> 50
<212> PRT
<213> Homo sapiens

<400> 585
Met Val Tyr Arg Phe Gly Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu
                5   10   15

Ala Ser Leu Gly Ser Ser Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp
            20   25   30

Arg Gln Ala Asp Pro Ser Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu
        35   40   45

Leu Phe
     50

<210> 586
<211> 60
<212> PRT
<213> Homo sapiens

<400> 586
Met Leu Val His Ile Tyr Ser Cys Cys Gly Met Val Tyr Arg Phe Gly
              5   10   15

Gln Met Ser Asp Asn Pro Phe Tyr Ile Leu Ala Ser Leu Gly Ser Ser
             20   25   30

Ser Cys Arg Asn Gly Leu Ala Ser Lys Trp Arg Gln Ala Asp Pro Ser
           35   40   45

Asp Gly Tyr Met Glu Pro Cys Phe Gln Leu Leu Phe
     50   55   60

<210> 587
<211> 1408
<212> DNA
<213> Homo sapiens

<400> 587
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gtaatctaca ccaatgaaaa catgtactac agctatattt gattatgtat ggatatattt 1260

gaaatagtat acattgtctt gatgtttttt ctgtaatgta aataaactat ttatatcaca 1320
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aaaaaaaaaa aaaaaaaaaa rwmgaccc   1408

<210> 588
<211> 81
<212> PRT
<213> Homo sapiens

<400> 588
Met Pro Gln Lys Gln Gln Asn Ser Gln Thr Glu Ala Lys Tyr Arg Ala
                  5   10   15

Leu Gln Phe Arg Gln Tyr Asn Lys Ser Val His Glu Val Asn Leu Lys
             20   25   30

Gly Ala Cys Phe Thr Val Ala Gly Leu Pro Arg Ala Trp Thr Thr Gln
             35   40   45

Tyr Ser Ile Ile Asp Lys Arg Ile Arg Gln Glu Ile Tyr Thr Cys Cys
     50   55   60

Leu Ala Phe Val Val Ile Tyr Thr Asn Glu Asn Met Tyr Tyr Ser Tyr
65   70   75   80

Ile

<210> 589
<211> 157
<212> PRT
<213> Homo sapiens

<400> 589
Met Thr Met Cys Leu Cys Val Ala Pro Met Gly Arg Ala Thr Arg Met
                  5   10   15

Ser Val Thr Cys Asp Arg Leu His Ala Asn Ser Arg Val Arg Tyr Leu
             20   25   30

Trp Cys Gln Lys Asp His Val Pro Gln Met Gln Asp Gln Asp Leu Glu
             35   40   45

Met Glu Ser Met Lys Ala Leu Glu Lys Leu Val Lys Arg Arg His Pro
     50   55   60

Pro Val Ile Phe Ala Ser Leu Val Gln Asn Val Thr Lys Met Pro Arg
65   70   75   80

Met Ser Gly Val Cys Val Ile Leu Thr Val Leu Lys Pro Thr Ser Ile

```
                    85                      90                      95
Pro Ser Ala Leu Leu Met Gly Asn Leu Met Ile Met His Ala Lys Ser
            100                     105                     110

Lys Lys His Arg Val Arg Asn Arg Arg Lys Leu Lys Ser Cys Leu Trp
            115                     120                     125

Val Asp Val Lys Ile Thr Gln Leu Gln Leu Leu Ser Leu Lys Met Gly
            130                     135                     140

Ile Met Gln Glu Gln Ile Met Gln Arg Met Leu Thr Asn
145                     150                     155
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<210> 590
<211> 347
<212> PRT
<213> Homo sapiens

<400> 590
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Met Leu Leu Ile Val Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr
                    5                      10                      15

Ser Leu Ser Asp Cys Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr
            20                      25                      30

Asp Asp Arg Glu Asn Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys
            35                      40                      45

Phe Asp Gly Glu Cys Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys
    50                      55                      60

Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly
65                      70                      75                      80

Glu Ser Tyr Gln Asn Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln
                    85                      90                      95

Gln Ser Glu Ile Leu Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala
            100                     105                     110

Gly Ser Gly Ser Gly Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser
            115                     120                     125

Gln Lys Glu Thr Ser Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys
            130                     135                     140

Asp Glu Asp Ala Glu Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser
145                     150                     155                     160
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Gln Thr Asn Phe Asn Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp
            165             170             175

Asn Ala Cys Gln Ile Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile
            180             185             190

Glu Val Met Ser Leu Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr
            195             200             205

Lys Ser Glu Asp Gly His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala
            210             215             220

Asn Lys Leu Glu Glu Ser Ala Arg Glu His His Ile Pro Cys Pro Glu
225             230             235             240

His Tyr Asn Gly Phe Cys Met His Gly Lys Cys Glu His Ser Ile Asn
            245             250             255

Met Gln Glu Pro Ser Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His
            260             265             270

Cys Glu Lys Lys Asp Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val
            275             280             285

Arg Phe Gln Tyr Val Leu Ile Ala Ala Val Ile Gly Thr Ile Gln Ile
            290             295             300

Ala Val Ile Cys Val Val Val Leu Cys Ile Thr Arg Lys Cys Pro Arg
305             310             315             320

Ser Asn Arg Ile His Arg Gln Lys Gln Asn Thr Gly His Tyr Ser Ser
            325             330             335

Asp Asn Thr Thr Arg Ala Ser Thr Arg Leu Ile
            340             345
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